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PHASE 1,  
FACTORS AFFECTING ATTRITION.

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21. ABSTRACT (Continue on reverse side if necessary and identify by block number) Research was conducted into the factors that influence early attrition of first term Navy/Marine Corps enlistees by administering questionnaires to 1105 first term enlisted men and supervisors. The sample included both attriters and non-attriters at a variety of units and locations. The survey instrument and subsequent analysis focussed on a number of specific issues, including differences in attrition		

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- rates between recruits and men in operational units, comparison of pre-service and service-connected factors associated with attrition, and comparison of attriter and supervisor views on attrition. A stepwise multiple regression feature was used to determine the relative influence of each variable and the cumulative influence of several variables.



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September 30, 1977

Dr. Bert T. King  
Office of Naval Research  
800 N. Quincy Street  
Code 452  
Arlington, Virginia 22217

Dear Dr. King:

We are pleased to submit the final report "Exploratory Development Research of U.S. Navy/Marine Corps Personnel, Phase 1, Factors Affecting Attrition" prepared under Contract No. N00014-76-C-0937.

The objectives of the research were to provide the Navy and the Marine Corps with an up-to-date profile of those enlisted personnel who leave the Service prior to successfully completing their first enlistment, as well as to present current information on factors that are contributing to the attrition.

This report summarizes the results of a survey of approximately 1,000 first-term enlisted men and 100 non-commissioned officers in the Navy and Marine Corps. Information about experiences before and after enlisting, attitudes about various features of the military, and demographic characteristics of respondents were obtained.

The survey results were summarized and cross-tabulated with several key variables. A stepwise-multiple regression was also used to determine the relative influence of each variable and the cumulative effect of the variables as a whole.

The analysis of the qualitative results was conducted by Dr. James Murphy and Mr. Gerald McConeghy under the direction

of Dr. Marshall G. Greenberg, a Senior Vice President of Booz, Allen & Hamilton Inc., and a recognized authority in mathematical psychology. Dr. Murphy received his Ph.D. degree in Communications from the Annenberg School of Communications at the University of Pennsylvania with specialization in the social psychology of communications and in organizational behavior. He has taught courses in research and has had considerable experience in the design and analysis of qualitative and quantitative research studies. Mr. McConeghy earned his M.A. degree in Social Psychology at Temple University. At the time the present project was conducted, he was working on his doctoral dissertation in the sociology department. His previous experience at Booz, Allen included several projects incorporating the conduct and analysis of individual and group depth interviews, as well as survey research studies. Dr. Greenberg received his Ph.D. degree in Mathematical Psychology from the University of Michigan, and later served on the faculty of the University of Minnesota teaching statistics and mathematical psychology. He is currently Vice President of the American Marketing Association, a member of the editorial boards of the Journal of Marketing Research, Research on Consumer Behavior, and is an Associate Editor of Management Science. He is also a former Chairman of the subsection on Statistics in Marketing of the American Statistical Association.

We are confident that this report meets the objectives of the study and feel that these data will be useful in assisting the Navy/Marine Corps in developing management options to gain control of the early attrition problem.

We wish to extend our appreciation for the excellent cooperation extended to our team throughout the course of the assignment.

If you should have any questions, please do not hesitate to call.

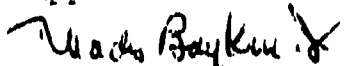
Very truly yours,



BOOZ-ALLEN & HAMILTON Inc.

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Vice President

## TABLE OF CONTENTS

	<u>Page #</u>
<b>List of Tables</b>	
<b>EXECUTIVE SUMMARY</b>	
I. INTRODUCTION.....	I-1
A. Objectives.....	I-1
B. Methodology.....	I-7
C. Sampling Procedures.....	I-10
D. Plan of the Report.....	I-11
II. OVERVIEW OF DISSATISFACTION AND THE ATTRITION PROCESS.....	II-1
A. Extent of Dissatisfaction.....	II-1
B. Counseling Received by Attriters.....	II-4
C. Intentionality of Misconduct.....	II-6
D. Embarrassment About Less Than Honorable Discharge	II-7
E. Summary and Implications.....	II-9
III. PRE-SERVICE FACTORS INFLUENCING ATTRITION.....	III-1
A. Demographic Characteristics.....	III-1
B. Enlistment Preparation.....	III-8
C. Reasons for Enlisting.....	III-14
D. Summary and Implications.....	III-14
IV. ORGANIZATIONAL FACTORS INFLUENCING ATTRITION.....	IV-1
A. Overview.....	IV-1
B. Regimentation, Leadership and Military Justice System.....	IV-2
C. Training Programs.....	IV-12
D. Duty Assignments.....	IV-16
E. Pay, Rank and Medical Care.....	IV-19
F. Interpersonal Relations.....	IV-21
G. Administrative Problems.....	IV-21

TABLE OF CONTENTS (CONT'D.)

	<u>Page #</u>
V. NON-MILITARY FACTORS INFLUENCING ATTRITION.....	V-1
A. Family and Friends.....	V-1
B. Social Life.....	V-4
C. Employment and Educational Opportunities.....	V-6
D. Drugs and Alcohol.....	V-7
VI. SUPERVISORS' OPINIONS AND RECOMMENDATIONS CONCERNING ATTRITION.....	VI-1
A. Supervisors' Perceptions of Attrition Causes....	VI-1
B. Supervisors' Recommendations for Reducing Attrition.....	VI-4
C. Compatibility of Supervisors' and Enlisted Men's Views.....	VI-11
VII. SUMMARY OF FACTORS INFLUENCING ATTRITION OF DIFFERENT GROUPS.....	VII-1
A. Recruit and Regular Duty Differences.....	VII-1
B. Marine Corps and Navy Differences.....	VII-2
C. Differences Between Blacks and Whites .....	VII-3
D. Educational Group Differences.....	VII-6
VIII. RECOMMENDATIONS FOR FURTHER RESEARCH.....	VIII-1
A. Recruit Information and Orientation.....	VIII-1
B. Counseling.....	VIII-1
C. Attrition Data Bank.....	VIII-2
D. Supervisory Personnel/First Term Enlistee Personality Conflicts.....	VIII-2
E. Supervisory Personnel/First Term Enlistee Communications.....	VIII-3
F. Financial Problems.....	VIII-3

TABLE OF CONTENTS (CONT'D)

Appendix

- A. Multiple Regression Results
- B. Copy of Navy Regular Duty Attriter  
Questionnaire and copy of Marine Recruit Supervisor  
Questionnaire

## LIST OF TABLES

<u>Table</u>		<u>Page #</u>
1	Description of Respondent Groups	I-8
2	Expressions of Dissatisfaction	II-2
3	Attriters' Desire for Discharge	II-4
4	Percent of Attriters Receiving Counseling	II-5
5	Expected Value of Counseling	II-6
6	Embarrassment Concerning Discharge	II-8
7	Age at Enlistment	III-2
8A	Education by Attrition Status and Service	III-4
8B	Percent of High School Graduates by Race	III-4
9	Percent Married	III-5
10	Family Composition of Attriters and Adjusted	III-6
11	Academic Performance of Respondents	III-7
12	Percent Having Pre-Service Arrests	III-7
13	Percent Giving One Month or Less Forethought to Enlisting	III-8
14	Percent Involved in Delayed Enlistment Plan	III-9
15	Percent Enlisting on the Buddy Plan	III-10
16	Percent Told about Each Factor by Recruiter	III-13
17	Average Importance Ratings of Reasons for Enlisting	III-15
18	Primary Causes of Dissatisfaction among Recruits and Regular Duty	IV-3
19	Factor Causing Most Dissatisfaction in the Fleet	IV-4
20	Conditions that Contributed to Attriters' Problems	IV-5

LIST OF TABLES

<u>Table</u>		<u>Page #</u>
21	Attriters' Perception of the Causes for their Attrition	IV-6
22	Changes that Would Induce Attriters to Stay in Service	IV-7
23	Perceived Results of Complaining About Supervisors	IV-10
23A	Preferences for Complaint Procedures	IV-11
24	Percent Enlisting for a Guaranteed School	IV-14
25	Percent Dissatisfied with Job Training	IV-15
26	Attempts to Change Duty Assignments	IV-17
27	Comparison of Duty Schedules	IV-18
28	Percent Dissatisfied with Rank and Pay	IV-19
29	Context of Reason for Attrition	V-1
30	Marital Status and Attrition	V-3
31	Percent Having a Car on Base	V-5
32	Characteristics of Supervisors	VI-1
33	Supervisors' Opinions of Factors Causing Attrition	VI-3
34	Perceived Results of Complaining about Supervisors	VI-5
35A	Recruit Supervisors' Evaluation of Suggested Changes for Reducing Attrition	VI-7
35B	Regular Duty Supervisors' Evaluation of Suggested Changes for Reducing Attrition	VI-8
36A	Regular Duty Supervisors' Attitudes Toward Alternative Counseling Programs	VI-10
36B	Recruit Supervisors' Attitudes Toward Alternative Counseling Programs	VI-10
37	Differences Between Black and White Attriters	VII-5



## EXECUTIVE SUMMARY

### I. STUDY OBJECTIVES

This report summarizes the results of a survey of approximately 1,000 enlisted men and 100 non-commissioned officers in the Marine Corps and Navy. The survey was an exploratory research project into the causes of non-academic attrition of first-term enlisted men. The research project aimed at the following objectives:

- Identifying factors, especially military organizational features, that influence attrition.
- Determining if the causes for attrition are the same for recruits and for men in operational units (regular duty).
- Determining why some groups, like non-high school graduates and blacks, have higher rates of attrition than other groups.
- Comparing the views of attriters and supervisors concerning attrition.
- Evaluating the reaction of attriters and supervisors to suggested organizational changes aimed at reducing attrition.

### II. A BRIEF OVERVIEW OF METHODOLOGY

Confidential personal interviews were conducted at military bases by trained civilian women using a structured questionnaire. Information about experiences before and after enlisting, attitudes about various features of the military, and demographic characteristics of respondents were obtained. The interviews lasted approximately one hour.

The twelve groups of Navy/Marine Corps enlisted men interviewed included recruits and men on regular duty, both adjusted and attriters,\* and supervisors in each service. Table 1 is a description of the respondent groups. In the case of Navy regular duty adjusted personnel, considerations outside the purview of the contractor precluded obtaining interviews from personnel currently assigned to operational fleet units. In lieu thereof, first term enlisted men undergoing instruction of Naval Schools Command, Great Lakes, whose prior assignment was aboard ship were interviewed. These men were asked to respond to the questionnaire from the viewpoint of their life aboard ship.

The survey results were summarized and cross-tabulated with several key variables. A stepwise multiple regression analysis was also used to determine the relative influence of each variable and the cumulative influence of several variables. The results presented throughout the report are formatted in conventional cross-tabulation type of tables. The more sophisticated multiple regression is presented in Appendix A. The two presentations are, of course, consistent.

### III. A SUMMARY OF MAJOR FINDINGS

#### A. General Findings Concerning Attrition

It should be noted that these findings and all others cited in the report are based on data from the sample, which was in turn developed within constraints placed on the number and location of respondents. In addition, it should be recognized that the responses of the attriters are essentially "exit interviews" of men leaving the service under adverse conditions. Since these men may have negative feelings against the organization discharging them, their individual comments regarding what occurred may not represent totally accurate accounts of what actually took place in all cases. Finally, data derived from an opinion or attitude type survey is by nature subjective. In view of

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\* Adjusted personnel are generally men who are in conformance with service regulations. Attriters are men who are in the process of being discharged for misconduct.

this, caution must be exercised in interpreting without reservation the perceptions of respondents as objective reality.

It is well recognized, therefore, that the sample on which this study is based is not the ideal random sample. The researchers cannot state with a statistically high level of confidence that the findings of the study are truly representative of Navy and Marine Corps personnel in general. The likelihood is good, however, that the sample used does reasonably represent the attitudes and feelings of the groups as a whole. For this reason, and to facilitate report preparation, findings are not repeatedly qualified by reference to the limitations on the sample.

Since this research project is an initial attempt to obtain current data on first-term enlisted attrition, the findings can serve as a series of hypotheses for follow-up studies with larger, more representative samples. It is in this context that this report has been prepared. The findings summarized below are drawn from both the cross tabulations and the multiple regressions.

- Recruits and regular duty men attrite for different reasons. Recruits are often unable to cope -- academically, psychologically, and physically. Attriters from the fleet do not get what they wanted out of the service. They see no benefit to, and feel no obligation for remaining in the service.
- There are many more similarities than differences between Marine and Navy attriters. The differences that exist apply principally to training and work assignments.
- Attrition from regular duty rarely results from a single problem or experience. Rather, it follows from continually increased levels of dissatisfaction. (See page II-10.)

- Among recruits, attrition usually involves first an involuntary element and then a voluntary element. Many recruits inadvertently get into trouble, then after being reprimanded or punished, they decide they want to leave the service. Regular duty men usually cause their own attrition by deliberate misconduct. (pp II-6, -7)
- Many attriters are salvageable. A large number said they would be willing to stay if certain changes were made. About 15% of the attriters would prefer to stay even under present conditions. (p. II-3)
  - Most enlisted men now view their service commitment as a contract. If they do not receive what they had expected, they feel justified in not keeping their contractual obligations. (pp. II-7, -9)
  - Black attriters show a higher interest in remaining in the service than do white attriters.
  - Recruit attriters are more interested in staying than are regular duty attriters. (P. II-3)
- There are high levels of dissatisfaction in both the Navy and Marine Corps among both attriters and non-attriters. (p. II-2) They complain about similar problems. Their experiences in the service are slightly different. What determines that one will attrite while the other remains adjusted seems to involve both a personality characteristic and some minor differences in the amount of dissatisfying experiences.
  - Although the study did not involve the use of psychographics (character analysis), there are data that indicate attriters tend to be more impulsive and have more difficulty communicating their needs and problems in an authoritarian setting.
- Differences in attrition rates of racial groups are not accounted for by any one or even a few organizational variables. Black attriters are not affected differently than white attriters; rather, they are affected a little more by each of the many factors causing attrition. (See Regressions 5 and 6 in Appendix A.)

- No single organizational factor accounts for a major portion of attrition. The most important organizational factors are: Appendix A, pp. A(6), A(12), A(16), A(20), A(24), A(30).
  - Supervisor-enlisted man relationships
  - Complaint procedures
  - Regimentation
  - Training school attendance
  - Job assignment
- Non-military factors, such as inadequate preparation, family problems, and the social life available are as important, or more important for regular duty men, than any organizational factor examined. (Table 21)
- Supervisors and attriters agree on the importance of several factors in influencing attrition. There is disagreement between them, however, on the importance of the supervisor's demeanor. The attriters interviewed often said harassment\* from supervisors is a major cause of their dissatisfaction and subsequent attrition. Supervisors, on the other hand, do not believe harassment is an important factor. (Compare Tables 21 and 33.)
  - However, many supervisors in the fleet do acknowledge that inadequate supervision and leadership are a cause of problems. This, they believe, results from insufficient leadership training. (p. VI-2)
  - Supervisors of recruits generally feel their peers are adequately trained and perform well. (p. VI-2)
- Supervisors appear receptive to many suggested changes aimed at reducing attrition. They stress the need for better recruiting, training, and job assignments. (Tables 35A and 35B)

\* The term "harassment" was a pre-coded response given to the interviewee.

- However, they are not receptive to suggestions of a positive reinforcement approach, which is the preference of attriters.
- Counseling programs are not widely used by attriters. If counseling is available, most men are either not aware of it, or they do not consider it worthwhile. (p. II-5)
- However, those men who did have counseling considered it friendly and sincere.

## B. Specific Causes

### 1. Demographic characteristics

- In the fleet, younger men have higher rates of attrition than do their older peers, but among recruits the younger men have lower rates. (Table 7)
- Blacks are more likely to attrite than whites. Some of this difference is accounted for by differences in pre-service factors, such as family background and pre-enlistment preparation. (pp. VII-3, -5)
- Less educated men have higher rates of attrition in recruit training and in the fleet. (Table 8A)
  - Level of educational achievement appears to be important for three reasons:
    - Since many non-high school graduates enlisted without extended forethought, this may reflect a personality characteristic that involves an "impulsive" element. (p. III-8)
    - It limits the choice of service occupation opportunities.
    - It is related to the ability to effectively communicate needs and problems. (pp. VII-5, -6)
- Men from small towns have lower attrition rates than men from large cities. (p. III-3)

- Sailors in the fleet who are married have significantly higher attrition rates than their unmarried peers. In the Marines, marital status is not related to attrition. (Table 9)
- Although there is no evidence indicating that perceived civilian employment opportunities influence attrition, attriters are slightly more likely than adjusted men to have been employed prior to entering the service. Both attriters and adjusted men feel their opportunities for civilian employment are good. (p. III-5)
- Compared to adjusted men, attriters are more likely to come from a lower socioeconomic background. (pp. III-5, -6)
- Even when compared to adjusted men having the same level of education, attriters appear to be more deficient in academic skills. (pp. III-6, -7)
  - About 21% of recruit attriters but only 2% of recruit adjusted have difficulty reading.
- Pre-service arrests are more common among attriters (27% vs 19%). (p. III-7)

## 2. Pre-service preparation

- Adequate planning and preparation for the service is a very important factor differentiating attriters and adjusted men.
  - Attriters are much more likely to enlist impulsively. Most do not give more than a month of forethought to their decision. (p. III-8)
  - Compared to adjusted men, attriters receive less information from recruiters about what to expect in the service. (p. III-11)

- Men who participate in the Delayed Enlistment Plan are less likely to attrite than non-participants. This is true regardless of the amount of forethought to enlisting, or the level of school completed. (p. III-9)
- Men who enlist on the Buddy Plan are less likely to attrite during recruit training. (p. III-10)
- Attriters are more likely than adjusted men to say they were unsure at the time of enlistment whether they would complete their enlistment. (p. III-10)
- Attriters and adjusted men have similar reasons for enlisting. To learn a skill or trade is the primary reason given by both. (See Table 17)
- There is no difference between adjusted and attriters in the encouragement to enlist that they received from family and friends. (p. III-9)

### 3. Organizational factors

- The factor cited most often by attriters as a cause of dissatisfaction and attrition is supervisors' behavior. (See Table 19)
  - Harassment, frequent criticism, false accusations, and favoritism are the most frequent complaints about supervisors. (p. IV-9)
  - Complaints are usually directed at NCO's, rather than officers.
- Most attriters feel the military system for expressing complaints about their supervisors does not work satisfactorily. They feel the system is biased toward career men and also discriminates against enlisted men. (pp. IV-10, -11)
  - Most men, but especially attriters, feel it would be useless to complain about the misconduct of a supervisor. (p. IV-11)



- Most attriters would prefer to take their problems and complaints directly to a commanding officer rather than use the chain of command. (See Table 23A)
- This perception of an unfair system for expressing complaints frequently provides attriters with their justification for attriting.
- Among adjusted men, regimentation causes more dissatisfaction for men in the fleet than for recruits. Among attriters there was no difference between recruits and men in the fleet on the importance of regimentation. (See Table 18)
- The recruit training program causes problems for many recruits because they are not prepared for it. The features of recruit training causing the most dissatisfaction and leading most often to attrition are: (See Table 21)
  - Fast pace
  - Regimentation for what is perceived as trivial matters
  - Supervisors' behavior and attitudes
  - Change in attitude toward the service
  - Classroom pressures (in the Navy)
- Physical training, strict rules of authority, and having personal requests denied cause some dissatisfaction but were usually not enough to lead to attrition.
- Among marines, men who attend a training school are less likely to attrite than men who do not. (p. IV-14)
  - Not receiving the training that was expected or promised is a frequent cause of dissatisfaction and attrition among sailors. (See Table 21)
- Attending a "Class A" school in the Navy apparently does not affect likelihood of attriting. (p. IV-13)

- Attriters, more often than adjusted men, are dissatisfied with the school training they received, but this, in itself, is rarely a primary reason for attriting. (p. IV-15)
- Dissatisfaction with duty assignment is not usually a cause of attrition. (p. IV-16)
  - The duty assignment experiences and work schedules of attriters and adjusted men are similar. (See Table 27)
  - Concerning the effect on satisfaction, the most important aspect of a duty assignment is the supervisor's attitude. (See Table 19)
  - Married attriters in the Navy frequently report their attrition is caused, at least in part, by being at sea too often. (p. V-4)
- The only group that expresses strong dissatisfaction with rank and pay is regular duty Marines, but they do not mention this as a reason for attriting. (pp. IV-19, -20)
- Attriters, as well as adjusted men, feel that medical care is important, and satisfaction with this is generally high. (p. IV-20)
- Interpersonal conflicts with other enlisted men are not a major cause of dissatisfaction or attrition. (p. IV-21)
- Administrative problems, such as not receiving proper pay, are only occasionally cited as causes of attrition. (pp. IV-21, -22)

#### 4. Non-military factors

- Family problems are a major cause of attrition in the fleet. This includes problems with wife as well as problems with parents and siblings. (p. V-1)

- Many attriters said they went AWOL to assist their family in an emergency situation. (pp. V-1, -2)

- According to the men interviewed, most spouses and girlfriends are not favorable toward the service, and many attriters said their spouses or girlfriends encouraged them to try to leave the service. (p. V-3)
- The social life available around the base or in the service generally is a cause of great disappointment for most men. However, this is not often an immediate cause of attrition. (p. IV-21)
- Alcohol or drugs are involved in about one out of six cases of attrition. (p. V-7)

C. Factors Differentiating Attriters and Adjusted Men in Each Segment

Results in this section are based on the stepwise multiple regression analysis. For each sample segment, the three or four variables that have the largest independent effect in differentiating between adjusted men and attriters are presented. The cumulative percentage of variance accounted for by these variables is also listed. This figure reflects the percentage of the total variation in attrition that is related to the variables extracted in the regression.

## 1. Marine Recruits

<u>Factors Differentiating Adjusted Men and Attriters</u>	<u>Cumulative Variance Accounted For</u>
● Attriters more often believe that if they complain about misconduct of a drill instructor, they themselves would be harassed and nothing would happen to the drill instructor	.12
● Attriters less often participate in the delayed enlistment program	.16
● Attriters less often have fathers who are employed in higher level occupational positions such as managers	.20

## 2. Marine Regular Duty

<u>Factors Differentiating Adjusted Men and Attriters</u>	<u>Cumulative Variance Accounted For</u>
● Attriters are less educated	.09
● Attriters more often believe they would be harassed if they complained	.16
● Attriters less often attend training school	.20
● Attriters less often participate in the delayed enlistment program	.23

### 3. Navy Recruits

<u>Factors Differentiating Adjusted Men and Attriters</u>	<u>Cumulative Variance Accounted For</u>
● Attriters more often believe they would be harassed if they complained	.33
● Attriters less often sign up for a training school	.45
● Attriters less often participate in delayed enlistment program	.50
● Attriters more often have reading difficulty	.53

### 4. Navy Regular Duty

<u>Factors Differentiating Adjusted Men and Attriters</u>	<u>Cumulative Variance Accounted For</u>
● Attriters give less forethought to enlisting	.12
● Attriters more often believe they would be harassed if they complain	.20
● Attriters are less educated	.25
● Attriters are more often married	.27

#### IV. RECOMMENDATIONS FOR FURTHER RESEARCH

The study clearly indicates a connection between a number of organizational factors and attrition. During the study, however, certain other factors which appear to be tied to attrition came to light. These issues could not be examined further since they are outside the scope of the study. Since their relationship to the attrition problem is evident, it seems that further research into these factors would be productive in the construction of a data base from which the Navy can develop management options to gain control of the early attrition problem. These areas recommended for further study are outlined below.

- The study indicates that many first-term enlisted personnel consider the information they received from the recruiter about prospects for personal success in the Navy/Marine Corps environment to be incomplete and/or misleading. They also say that they were inadequately prepared for the rigorous training and discipline they encountered during recruit training. In some cases, the serviceman believes that a breach of promise was made. He therefore feels this is sufficient moral justification for not completing his obligated service.
- The current recruit information and orientation programs should be closely examined to determine exactly what information and/or impression are being conveyed.
- Approximately 60 to 70 percent of the attriters interviewed did not receive counseling when the difficulties which led to their attrition first arose. Of this group, nearly half feel counseling would have been helpful.
- Research should be conducted into the availability, administration, and use of counseling programs. Specifically, the differences in the type and amount of programs between the units with low attrition rates and those with high rates should be compared.

- The research should include an analysis of the attitudes of men subsequent to receiving counseling to determine the effectiveness of counseling relative to reducing early attrition.
- The Navy and Marine Corps do not currently maintain specific and readily available data banks of information on attriters relative to both the perceptions of the individual and his supervisors as to the root cause of his early attrition. This information would be helpful in developing management options to gain control of the early attrition problem.
  - A standardized questionnaire should be developed and administered to attriters who are about to be separated from the service as part of the exit procedure. The questionnaire should inquire into the causes of the attrition and what both the attriter and his supervisor feel might have been done to preclude his attrition.
  - The data from the questionnaire should then be compiled and summarized to indicate common areas of difficulty, etc.
- The study clearly indicates that conflicts with NCO supervisory personnel contribute to first-term early attrition. What are commonly identified as personality conflicts frequently involve disagreements over values, goals, and especially, norms.
  - Research should be conducted to determine the sources of the conflicts, their cognitive elements, and the perceptions of both groups as to appropriate methods of resolution.
- The study indicates that in many instances the inability of the serviceman to effectively communicate his needs or problems to his supervisor/instructor is a catalyst to the attrition process.
  - The issue of the communication gap between servicemen and their supervisors should be studied further to determine exactly what types of communication problems exist. Are the men afraid to express their

problems/questions? Are they overly aggressive in their relationships with authority figures? Are the supervisors themselves open to listening to problems and questions?

- Once the specific problem areas have been ascertained, an approach to tailoring a communication workshop specifically to the needs of the people involved should be researched.
- Attriters, both married and unmarried, frequently feel that resolving family financial problems takes priority over their obligation to complete their enlistment.
- Research should be conducted to determine how adjusted men with similar problems handle their finances.
- In addition, counseling programs should be evaluated in terms of their ability to help both the serviceman and his spouse when financial problems arise.



## I. INTRODUCTION

## I. INTRODUCTION

### A. Objectives

In recent years there has been a significant increase in the number of Marine and Navy first-term enlisted men leaving the service for nonacademic reasons prior to successfully completing their enlistment. This increased attrition has implications for both defense costs and the combat readiness of the Marine and Naval forces. In an effort to determine the causes for this increased attrition, as well as outline steps necessary to reverse this trend, the Office of Naval Research (ONR) has authorized several studies on the matter.

This study is an initial attempt to obtain current data on attrition not related to academic or medical deficiencies. More specifically, its focus is on identifying the military organizational factors that may affect attrition. This selective focus does not mean that it was assumed at the outset of the study that organizational factors are the most important influence on attrition. Rather, the concentration on organizational features is an attempt to cover one aspect of military life as thoroughly as possible.

Even though the study has attempted to cover most aspects of Navy and Marine Corps organizations, it is not the goal of the study to provide a definitive measure of the effect of each factor. Survey limitations in terms of time, number of respondents, geographical locations\* and the absence of fleet personnel in the regular duty

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\* Interviews were conducted at one of three Navy Recruit Training Centers, one of two Marine RTC's and one of three Fleet Marine Force locations.

adjusted Navy sample\* make this unrealistic. In addition, the highly subjective nature of data obtained in an opinion or attitude survey dictates extreme caution in interpreting without reservations the perceptions of respondents as objective reality.

It is well recognized, therefore, that the sample on which the study is based is not the ideal random sample. The researchers cannot state with a statistically high degree of confidence that the findings of the study are truly representative of Navy and Marine Corps personnel in general. The likelihood is good, however, that the sample used does reasonably represent the groups as a whole. For this reason, and to facilitate report preparation, findings are not repeatedly qualified by reference to limitations of the sample.

The goal of the study is to obtain current data on attrition leading to the development of a series of hypotheses which can be researched with larger and more representative samples. The data from these follow-up studies can then be incorporated into a conceptual framework or model of attrition which, in conjunction with other factors affecting attrition, can be used to monitor, test, and evaluate alternative manpower policies and practices. This is the context in which this report has been prepared.

The specific research questions that have guided the direction of this study are as follows:

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\* For regular duty adjusted Navy respondents survey limitations required, in lieu of shipboard personnel, the use of students at Service Schools Command Great Lakes whose prior assignment had been with a fleet operational unit. These personnel were asked to respond to the questionnaire in terms of their shipboard life. They are included with those Navy and Marine Corps personnel serving, or in the case of attriters, having served in operational units, i.e., "the fleet".

- Which organizational features affect attrition? The first step necessary in understanding the causes and remedies for attrition is to identify the factors affecting attrition. Since the effect of these factors may or may not be known to the attriters, it is necessary to investigate not only attriters' perceptions of attrition causes, but also experiential and situational factors correlated with attrition.
  
- In addition to identifying factors directly related to attrition, it is also necessary to search for factors that may intervene in the process but not appear as directly related to attrition. This applies especially to factors that may cause dissatisfaction or loss of morale. The purpose of this strategy is to determine if certain factors function to produce higher attrition risks while other factors serve as immediate causes of attrition for men in these risk categories.
  
- What is the relative effect of organizational features compared to the effect of non-military factors? To determine the magnitude of the organizational factors' contribution to attrition it is necessary to identify other causes of attrition and measure their effect. This indicates the relative importance of organizational factors. It also provides some basis for determining the extent of attrition reduction that could be made possible by instituting changes in organizational features.
  
- Why do these features affect attrition? Once the organizational features affecting attrition have been identified, it is worthwhile to try to understand why they have this effect. The emphasis here is on identifying how attriters perceive these features. This information shows if changes in organizational regulations and policies are needed, or if, in fact, the need is merely to enforce or implement existing regulations and policies.
  
- How are different groups affected by the various organizational features? Current literature on attrition indicates that minorities and non-high school graduates have higher rates of attrition. It is important to know

if these groups are affected more intensely by each of the many causes of attrition, or if, on the other hand, there are one or a few causes that have a more pronounced effect on these groups.

In addition to race and education, other group variations examined include age, socioeconomic status, the current stage of service, and, of course, the branch of the service.

- What organizational changes would reduce attrition?  
Simply because a factor is perceived as a cause of attrition does not necessarily mean attrition can be reduced by changing that factor. Such a change could possibly cause discontentment and attrition among men who were originally satisfied with the feature. On the other hand, it is possible that changes in a factor not directly related to attrition may compensate for the dissatisfaction caused by another factor; for example, perhaps men would be willing to make a trade-off and be more tolerant of undesirable features if their benefits were increased.

Thus, it is important to investigate the expected effect on attrition of changes in several factors, or several combinations of factors.

The principal organizational factors examined in this study include:

- Regimentation, leadership and military discipline system
- Training programs
- Duty assignments
- Pay, rank and medical care
- Interpersonal relations
- Administrative problems

The principal non-military factors examined in this study include:

- Pre-service preparation
- Influence of family and friends
- Social life
- Employment and educational opportunities
- Drugs and alcohol

The importance of these factors was measured in several ways. First, the importance of just having experienced a factor was examined. For instance, each respondent was asked if he attended a training school. Rates of attrition are then correlated with training school attendance.

Secondly, men were asked what their aspirations, expectations, and perceived opportunities or benefits are concerning each factor. For example, men were asked if they had attached a great deal of importance to attending a training school before they entered and what they expected to benefit from this training. Then those who did attend were asked if their training school experience met their aspirations and expectations. This information provided an indication of what may cause dissatisfaction as well as attrition.

Thirdly, measures of satisfaction were obtained. These measures apply to overall satisfaction with the service, as well as satisfactions with individual organizational features. By correlating these measures to attrition, assumptions can be made as to whether attrition results from accumulated dissatisfactions or if it is independent of dissatisfaction.

Finally, attriters were asked to identify what they consider the immediate and remote causes of their attrition. These perceived causes are then related to the other measures to determine if causes of attrition are fully recognized by the attriters or if there might be underlying unconscious elements involved.

In addition to the data about causes of dissatisfaction and attrition gathered from enlisted men, supervisors were also asked their views about the causes and remedies for attrition. This information can serve three purposes. First, it may provide a measure of lower level supervisory personnel's awareness of the causes of attrition. Secondly, it could indicate the degree of congruity between enlisted men's and supervisors' perceptions of dissatisfaction and attrition causes. Thirdly, it should give an indication of which organizational changes would be readily accepted, and which would be resisted by supervisors.

One additional objective of the study is to obtain a description of the attrition process. This involves determining how a man tries to alleviate his problems, how he views his alternatives, whom he consults and how he evaluates consultation he receives. Understanding the attrition process also entails identifying what percent of the men are attrited voluntarily and what percent would prefer to remain in the service.

## B. Methodology

The data gathering method used in this research was personal interviews employing a structured questionnaire. The interviews were conducted by middle-aged women who were personally trained by Booz, Allen's field staff. All respondents were guaranteed anonymity, so no name, serial number, unit, rank, or other identifying information was asked.

### Research Design

The research design was developed to determine if causes of attrition have similar impact on men in various situations. The design includes three principal components. First, both attriters and adjusted men were interviewed.\* This was an attempt to create a simple experimental design by asking each group what experiences they had. The retrospective attitudes of each group were also measured. Secondly, men at the recruit stage and the regular duty stage (in the fleet) were questioned to determine if men in the fleet attrite for different reasons than men at the recruit stage. Thirdly, because of a need to tap experiences unique to each group, marines and sailors were administered questionnaires that were slightly different. Thus, the research design involved eight separate groups of first-term enlisted men. Twice as many attriters as adjusted men were interviewed because of the need to get sufficient information on the attrition process. The ratio of men in the fleet to recruits interviewed is two to one because of the need to provide an adequate number of cases who had experienced each organizational factor.

Four groups of supervisors were also interviewed. Recruit and regular duty supervisors from each branch of the service were asked questions relevant to the situation of their men.

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\* Attriters interviewed are men in the process of being discharged for misconduct. The adjusted groups consist of men who are in general conformity with service regulations. They represent, in essence, the average marine or sailor.



Table 1 contains a list of the twelve different groups interviewed.

Table 1  
Description of Respondent Groups

<u>Version</u>	<u>Group</u>	<u>Location</u>	<u>Number</u>
1	Marine Recruit Adjusted	Parris Island	50
2	Marine Recruit Attriters	Parris Island	100
3	Marine Regular Duty Adjusted	Camp Lejeune	100
4	Marine Regular Duty Attriters	Camp Lejeune	201
5	Navy Recruit Adjusted	Great Lakes Recruit Training	60
6	Navy Recruit Attriters	Great Lakes Recruit Training	120
7	Navy Regular Duty Adjusted	Great Lakes Service Schools Command	120
8	Navy Regular Duty Attriters	Great Lakes T.P.U./ Norfolk Separation Station	244
9	Marine Recruit Supervisors	Parris Island	15
10	Marine Regular Duty Supervisors	Parris Island	35
11	Navy Recruit Supervisors	Great Lakes Recruit Training	20
12	Navy Regular Duty Supervisors	Great Lakes Service Schools Command	40
	Total Enlisted Men		995
	Total Supervisors		110

## Questionnaire

The questionnaires consisted of both open-ended questions and questions with pre-coded answers. The open-ended type of questions consisted of a general question such as "What has happened that is causing you to be attrited?", which would be followed up by interviewer probes such as "What do you mean by that?", "When did that first happen?", etc. These questions with follow-up probes often elicited several pages of narrative information for one respondent.

The information obtained from these open-ended questions serves several purposes. First, it provides a wealth of illustrative descriptive data, especially concerning the sequence of events preceding attrition. It also serves as the basis for additional quantitative analysis. Booz, Allen coding department staff coded the responses into several categories, some of which were not measured anywhere else in the questionnaire. These categories were then correlated with other factors to give an indication of their relative importance. The open-ended questions also enable the attriter to completely "tell his side of the story."

Most of the pre-coded questions consisted of simple choice answers such as "yes-no" or "agree-disagree", but some also involved the respondent's providing a relative assessment of several factors. For this type of question, respondents were given a list of the factors along with the possible answer categories from which they were to choose.

Questionnaires were formatted chronologically. That is, the first series of questions pertained to pre-service preparation; the next series, to experiences in recruit training; and the final series, to experiences while in the fleet. Attriters were given an additional set of questions that referred to the problems and experiences encountered that were leading to their attrition. Questions on demographic characteristics were at the end of each questionnaire.

For each organizational factor, there were questions about the respondents' expectations and aspirations for, experiences with and evaluation of, that factor. Recruits were asked what their expectations were for aspects of

fleet duty prior to entering the service. Regular duty men were asked what their expectations had been. Attriters, especially recruit attriters, were asked conditional questions such as, "If you had stayed in the service,...."

Questions were also designed to determine in what manner organizational factors exert their influence. Respondents were asked how satisfied they are with each factor, and if problems related to this factor are a primary cause of attrition.

### Analysis

The information gathered in the interviews was subjected to three types of analysis. First, a qualitative analysis was made of the open-ended questions. This provided information on the processes, which was useful for clarifying and complementing results from the pre-coded questions.

Secondly, responses to all questions were summarized for each respondent segment. In addition, within each segment every response item was cross-tabulated by four dichotomized variables: race, time in service, education and satisfaction level.

Thirdly, a stepwise multiple regression analysis using attrition as the dependent variable was performed on recruits and regular duty men in each branch of the service. On the average, about 20 independent variables were included in each regression. This analysis included an intercorrelation matrix, the proportion of variance explained by each independent variable, and the total proportion of variance explained by all the variables in the regression. Tests of significance (F-test) were also run on these regression equations. The regression analysis results are presented in Appendix A.

### C. Sampling Procedures

The original sample design included a random sample from each of the twelve groups. Unfortunately, time constraints and logistical problems made it impossible to obtain a random sample from each group. Instead, respondents from five groups were randomly selected, and respondents from the other seven groups were obtained on an availability basis. These latter samples are designated quota samples.

All groups of attriters were quota samples. There were not enough attriters available in the scheduled time period to enable a random selection. Instead, every available attriter leaving the service at the interviewing stations during the interviewing period (approximately four weeks -- from the last week in August to the third week in September) was interviewed. However, there is no reason to suspect these attriters are atypical of attriters in general.

Marine adjusted men were randomly sampled. Recruits were obtained through use of random laundry numbers and regular duty men were randomly selected from the personnel files at Commandant Headquarters.

Navy adjusted men were obtained in quota samples since it was not possible to use random sampling procedures at the time.\* Recruit adjusted were obtained from companies in the fifth week of training, their service week. The men selected met two criteria -- they were not in apparent danger of attriting and they were not disciplinary problems. Hence, this group by definition constituted a "more adjusted" group than Marine recruit adjusted men.

Respondents in the supervisor sample were E-6's to E-9's who had supervisory experience. Generally, the supervisors were sampled from the same units as the adjusted men.

#### D. Plan of the Report

This report is divided into seven chapters.

The following chapter provides an overview of the inter-related features of dissatisfaction and the attrition process. This involves first, a description of the extent of dissatisfaction and then a description of how men try to cope with their problems. This chapter also looks at attriters' attitudes toward receiving a less than honorable discharge.

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\* See footnote page I-2

In Chapter III the influence of background characteristics on attrition is examined. This includes demographic characteristics such as age, race, education, and socioeconomic status. The amount and type of pre-service preparation, such as meetings with recruiters or forethought to joining, is also examined for its effect on attrition. The third feature examined in this chapter is the respondents' reasons for enlisting, including "push" as well as "pull" factors.

The fourth chapter is the most important and most inclusive part of the report. The major organizational features are examined in detail here. Several aspects of each feature are scrutinized.

Chapter V discusses the influence of factors unrelated to the military organization that might affect a man while he is in the military. The interactions between these factors and organizational factors are examined.

Chapter VI presents supervisors' opinions about causes of attrition, and their recommendations for curtailing attrition rates.

Following this, Chapter VII attempts to summarize the effects of various factors on each of the major segments. Variations by race and education are also included in this summary.

Appendix A presents the results of the multiple regression analysis. This includes a listing of variables used in the regression, the correlation coefficient ( $R^2$ ) between each variable and attrition, corresponding F scores and level of significance.

Two questionnaire versions are also included in Appendix B. Version 8 questionnaire, used for the Navy regular duty attriters, is only slightly different than

Version 4, the one used for Marine regular duty attriters. Most questions asked of recruits and regular duty adjusted men are contained in this questionnaire. Version 9, used for Marine recruit supervisors, is provided as an example of the type of questionnaire used for supervisors.

### Tables

Most tables in this paper present results in percentages. Unless otherwise noted, the number of respondents involved is the number of that group listed in Table 1.

When data are presented in combined form for several groups this indicates the differences between the groups are small. For instance, if a figure is presented for all Navy attriters this indicates that Navy recruit attriters have characteristics or responses similar to Navy regular duty men on the issue.

In interpreting the tables, the research attempts to comment upon and highlight those relationships in the data that appear to be of practical interest and worthy of further consideration. Statistical tests were not conducted upon these tabulations for the following three reasons:

- The study was exploratory in nature and combined both a qualitative and quantitative component. The report attempts to integrate these components by examining all of the data for consistency and attempting to form a cohesive set of hypotheses and recommendations. Consequently, the implications of any given table or portion of the data may depend more on its relationship to the overall pattern of results than on the statistical significance of the table as an isolated entity.
- In most instances, it is the practical significance rather than the statistical significance of a relationship or a difference that needs to be addressed. While the former may depend upon the predispositions of the reader, it is a fact of life with which applied research must contend. When summary statistics are derived from large samples, as are many of the data in the present study, relatively weak and unimportant relationships can achieve statistical significance.

- Most statistical tests, even those of the non-parametric variety (that make minimal assumptions about the nature and form of underlying distributions) are firmly rooted in the concept of random sampling. The application of such tests to data from a non-probability sample would be inappropriate and would imply a level of precision in measuring the generalizability of sample results that could not be defended. The methodology of the study is clearly presented including the fact that data were collected from a nonprobability sample. The reader must judge, in the context of this exploratory study, the extent to which the resulting data support the hypotheses and conclusions that are drawn.

## II. OVERVIEW OF DISSATISFACTION AND THE ATTRITION PROCESS



## II. OVERVIEW OF DISSATISFACTION AND THE ATTRITION PROCESS

Survey responses indicate that in most of the cases attrition represents the culmination of steadily increasing dissatisfaction with military life. This chapter examines the levels of dissatisfaction existing among adjusted men and attriters at each stage of their service. It also examines how men attempt to alleviate their dissatisfaction and avoid or hasten their attrition. Later chapters attempt to identify and measure factors causing dissatisfaction and attrition; this chapter specifically describes how enlisted men in the sample handled their dissatisfaction and impending attrition.

### A. Extent of Dissatisfaction

Dissatisfaction among the various groups was measured in different ways. Recruits were asked to rate their satisfaction on a four-point scale from very satisfied to very dissatisfied. Adjusted recruits were also asked if they expect to complete their enlistment. Regular duty men were asked how satisfied they had been at the completion of recruit training, and whether they would have accepted a discharge at that time if they had been offered one as part of a manpower cutback. Adjusted men in the fleet were also asked if they would accept a discharge now if offered. Attriters were asked whether they would prefer to stay in the service or be discharged if they now had that option. In addition, all men in the fleet were asked to rate their satisfaction with each organizational feature. (These results, however, are presented individually throughout the report where the respective features are examined.)

The responses to these question provide some interesting results, which are presented below.

As expected, attriters are more often dissatisfied with the service than are adjusted men. Among recruits in the Marines, 14% of the adjusted men said they are dissatisfied, compared to about 53% of attriters. Among recruits in the Navy, 71% of the attriters were dissatisfied. (Only 7% of the adjusted recruits were dissatisfied, but it should be remembered that men in this group were selected because they were apparently well adjusted.

Among men in the fleet, about 57% of adjusted would accept a discharge if it was offered to them as part of a manpower cutback and about 85% of attriters would prefer to be discharged even if they had a choice.

The difference between adjusted men and attriters is more pronounced among recruits for two reasons. First, few adjusted recruits, but many adjusted men in the fleet, are dissatisfied. Secondly, recruit attriters more often consider themselves, and not the service, as the source of the problem. Hence, if they are dissatisfied, it is with themselves because of their inability to adjust, rather than with the service.

Among recruits, dissatisfaction appears to be higher in the Navy, but in the operational units, differences between the Marines and Navy are minimal. Even though Navy adjusted recruits were more selective respondents than their Marine counterparts -- and hence expressed more satisfaction -- other evidence indicates dissatisfaction is higher for Navy recruits. For instance, more Navy than Marine recruit attriters said they are dissatisfied, and more regular duty sailors than marines said they were dissatisfied at the completion of recruit training. In the fleet, however, Marine adjusted men and attriters are slightly more willing to accept a discharge than their Navy counterparts. These results are presented in Table 2.

Table 2  
Expressions of Dissatisfaction

	<u>Marine</u>		<u>Navy</u>	
	<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
Recruits dissatisfied	14%	53%	7%*	71%
Men in fleet who were dissatisfied at end of recruit training	14%	33%	38%	32%
Men in fleet less than 18 months who would prefer to be discharged	71%	88%	68%	92%
Men in fleet 18 months or over who would prefer to be discharged	56%	80%	41%	79%

\* This figure is underestimated because of sampling bias. The Navy adjusted recruits represent well adjusted recruits rather than typical recruits. If it were assumed that rates in the Navy follow the same trend as rates in the Marines then the best estimate of the true percentage for this group would be about 38%.

Rates of dissatisfaction are highest among men who have been in the service less than 18 months. As the data in Table 2 indicate, this is true for adjusted and attriters in both branches of the service. Some reasons for this trend are related to the military while others are not. For instance, men in the service less than 18 months more often complain about their training, job assignment, social life and lack of travel opportunities. They are less likely to have cars and less likely to have been on a cruise. In effect, they are more often disappointed and bored, and feel isolated in their present situation.

Men in the service 18 months or longer are more likely to be married, and hence dissatisfied because they are not with their dependents. This is especially true for sailors. The only organizational factors that seasoned servicemen complain about more than younger men are supervisors' attitudes and harassment.\* They apparently feel that they have reached a point in their military career when they should no longer be subjected to the same authority patterns that are used to regulate younger men. One Navy attriter who had completed three and a half years of service expressed it this way.

"I'm fed up with it now. When I first enlisted I tried to put up with them (supervisors). As time went on the difference of treatment between officers and enlisted men really bothered me."

About 16% of men being attrited would prefer to remain in the service. Recruit attriters in both branches are more likely than attriters in the fleet to say they would prefer to stay in the service if they had the choice. Another indication of recruits' desire to stay is the fact that only 15% said they would not stay no matter what changes were made in the service. Thirty-three percent (33%) of the regular duty attriters interviewed took this position.

Most attriters said they had mixed feelings throughout their service careers about wanting to be discharged. In other words, there had been good times and bad times for most attriters. A much smaller number, about 18%, said they have wanted to be discharged since training. The results of the question "Have you always wanted to get out, always wanted to stay, or felt both ways sometimes?" appear in Table 3.

\* The term "harassment" was a pre-coded response given to the interviewee.

Table 3  
Attriters' Desire for Discharge

<u>Attitude</u>	<u>Recruit Attriters</u>		<u>Regular Duty Attriters</u>	
	<u>Marine</u>	<u>Navy</u>	<u>Marine</u>	<u>Navy</u>
Always wanted discharge	14%	18%	24%	14%
Always wanted to stay	15%	21%	7%	11%
Had mixed feelings	71%	61%	68%	75%
Total	100	100	99	100
N	(100)	(120)	(201)	(244)

**B. Counseling Received by Attriters**

This section examines the extent of counseling and advice, both formal and informal, received by attriters prior to their attrition. Attriters' perceptions of the value, or potential value, of this counseling are also examined.

A sizable number of attriters, especially marines in the fleet, ask their superiors to help them leave the service. About 30% of Navy and Marine recruit attriters ask for this type of assistance, while in the fleet 58% of Marines and only 20% of Navy men ask for it. The reason for the large difference between sailors and marines in the fleet is not known.

It was not feasible to determine at what point in the attrition process most of these requests are made. Some respondents admitted making the requests for the first time only after returning to the base from being absent without leave (AWOL). Others, however, said they tried to obtain a discharge first, and then after being refused, went on unauthorized absence (UA). One third (33%) of Navy attriters in the fleet and 23% of their Marine counterparts said their problems resulted from an act they committed after being denied a request. Since most of these requests were for things other than a discharge, it appears that only about 10% of attriters in the fleet go UA or violate some other regulation because they are denied a discharge.

Approximately 7% of Marine and Navy attriters in the fleet said their superiors encouraged them to try to obtain a discharge from the service. A slightly smaller percentage of recruits, about 4%, said they were encouraged by a superior to seek a discharge. Thus, very few men are leaving the service because they are encouraged by their superiors to do so.

Approximately one out of three attriters said they received counseling for their problems. All attriters were asked if, when their problems with the Marines/Navy first occurred, they received advice or counseling from any sergeants/petty officers or officers. There is not much difference in responses among the several groups. The results are presented in Table 4.

Table 4  
Percent of Attriters Receiving Counseling

	<u>Marines</u>	<u>Navy</u>
Recruits	37%	28%
Regular Duty	34%	41%

Of the attriters who received counseling or advice, about 40% said they had requested it themselves, while the other 60% said it had been unsolicited. These men were also asked how they regard the counseling received; that is, do they consider it friendly and sincere, or cold and impersonal. Overall, about two out of three men said it was friendly. During the interviews, recruits were slightly more likely than men in the fleet to say they were offered counseling and that it was friendly.

The reader should be aware that the figures just noted are percentages of percentages, and although the counseling that is administered is generally favorably received, the giving of counsel and advice to men with adjustment problems is the exception rather than the rule. For instance, of all attriters combined, the percentage that received what they considered to be friendly counseling is only about 25%. The percentage that received friendly counseling without first requesting it is only 16%.

This pessimistic conclusion concerning the utilization of counseling must be viewed with some caution because

adjusted men were not asked specifically about their experiences with counseling programs. It is, of course, possible that many potential attriters are rescued because of effective counseling. However, remarks and responses offered by adjusted men do not indicate they had benefited to any large extent from counseling.

Among attriters who did not receive counseling, about 40% feel it would have been helpful to them if they had received some. Marines interviewed were slightly more likely to feel this way than sailors. Table 5 illustrates these attitudes.

Table 5  
Expected Value of Counseling

<u>Expected Value</u>	<u>Recruit Attriters</u>		<u>Regular Duty Attriters</u>	
	<u>Marines</u>	<u>Navy</u>	<u>Marines</u>	<u>Navy</u>
Would have helped	41%	37%	46%	37%
Would not have helped	46%	43%	45%	52%
Do not know	13%	20%	9%	10%
Total	100	100	100	99
N	(100)	(120)	(201)	(244)

C. Intentionality of Misconduct

In an effort to determine how much attrition is voluntary, attriters were asked if they had realized at the time they committed the offense that they could be discharged for it. Those who said no were then asked if they would still have committed the offense had they known. The results show important differences between recruits and regular duty men on this issue.

Most recruit attriters said their attrition did not result from deliberate misconduct, but most regular duty attriters said they deliberately did something wrong. Only about 30% of recruit attriters said they knew they could be discharged for doing what they did. Generally, recruits are initially unaware that such things as the inability to keep up with the fast pace of training, refusing to comply with commands of their drill instructor/company commanders, or inability to meet classroom or physical training standards could lead to attrition.

Seventy-two percent (72%) of regular duty attriters said they were aware of the possible consequences of their actions. This is to be expected since most men in the fleet went AWOL before being attrited. Included among the 29% who said they had not expected to be discharged are men who said they were falsely accused of theft, using or possessing drugs, etc., men who felt justified in going AWOL because of personal problems or perceived mistreatment by a superior, and men who committed impulsive acts such as punching a supervisor or knifing another enlisted man.

Among men in the fleet who had not considered the possibility of being attrited before they acted, nearly half said they would have committed the offense anyway, even if they had known it would lead to their attrition. This means, in effect, that only 15% of attriters in the fleet unintentionally put themselves into a position of being attrited. A smaller percentage of recruit attriters said they would commit the same offense, but the data from the responses to this question are not significant in view of the large number (70%) of this group who had unintentional offenses.

D. Embarrassment About Less Than Honorable Discharge

At the completion of each interview, attriters were asked, "Your discharge from the Marines/Navy will not be an Honorable Discharge. Will you be: very, somewhat, or not at all embarrassed about this?" The responses indicate very low levels of embarrassment exist.

Almost three-fourths of regular duty attriters said they are not embarrassed about receiving a discharge which is not Honorable. Almost one-half of the recruits feel this way. (See Table 6.) Only a few regular duty attriters said they are very embarrassed.

Table 6  
Embarrassment Concerning Discharge

<u>Degree of Embarrassment</u>	<u>Marine Attriters</u>			<u>Navy Attriters</u>		
	<u>Recruits</u>	<u>Less than 18 months</u>	<u>18 months or more</u>	<u>Recruits</u>	<u>Less than 18 months</u>	<u>18 months or more</u>
Very embarrassed	14%	4%	15%	45%	11%	15%
Somewhat embarrassed	29%	13%	19%	19%	16%	15%
Not at all embarrassed	<u>57%</u>	<u>83%</u>	<u>67%</u>	<u>36%</u>	<u>72%</u>	<u>70%</u>
Total	100	100	101	100	99	100
N	(100)	(23)	(172)	(120)	(79)	(164)

Although the number feeling no embarrassment is surprisingly large, the responses are consistent with statements and opinions provided elsewhere in the questionnaire. Most men in the fleet feel no remorse or embarrassment; rather, they feel justified in attriting for any one, or several, of three major perceptions:

- There are higher priorities, such as family welfare or own mental health, to consider.
- The military did not keep its part of the contract by providing promised training or job assignment.
- Since military laws are unjust because they do not function to correct mistreatment from supervisors, there is no moral responsibility to obey these laws.

These reasons may be based on fact, they may be rationalizations disguising other reasons, or they may be merely based on misperceptions or misunderstandings. However, regardless of their psychological origin these reasons are widely held among attriters in the fleet and help to explain why there is little embarrassment or remorse concerning receiving a less than honorable discharge.

Recruits have higher rates of embarrassment than do regular duty personnel because their problems more often result from their inability to cope. This is also the reason for the differences between Navy and Marine recruit attriters. As shown later, Marine recruits more often resent the dehumanizing nature of training, while Navy recruits are more often frustrated with their inability to keep pace and handle classroom pressures.



Table 6 also shows that men in the fleet with less than 18 months time in service show the least embarrassment. Although this appears to be due primarily to their low status on the totem pole and consequent feelings of relative deprivation, it may also reflect a difference in attitude of men who enlisted after the draft was eliminated. There is some evidence from analysis of narrative responses that these more recent enlistees view their enlistment as a contractual arrangement wherein both parties must meet their obligations. Some attriters admit responsibility for first breaking the contract, but most feel that the military did not keep its part of the contract. One sailor who had been in less than a year expressed his position as follows:

"When I enlisted the recruiter guaranteed me a Basic and Advanced Electronics school. When I went to classification in boot camp I found out I had no school. They would not believe my buddy or my parents that I had been guaranteed school. I was on the weightlifting team before I came in and the Navy was supposed to sponsor me, according to my recruiter. I turned down a college scholarship to go into the Navy and then I get the run around. I decided that I had it."

#### E. Summary and Implications

This section focuses on the principal findings to emerge in this chapter. It also includes implications for policy directives aimed at intervention in the attrition process. The findings concerning dissatisfaction are:

- Dissatisfaction peaks somewhere between the end of recruit training and 18 months of service.
- In the fleet, marines are more dissatisfied than sailors. The reverse is true among recruits.
- Dissatisfaction among adjusted men is almost as high as dissatisfaction among attriters.

Later chapters show how and why recruits differ from men in the fleet in dissatisfaction. The most important point to be noted here is the large amount of dissatisfaction among the average (i.e., adjusted) men in the

fleet. This finding suggests that attriters are not merely men who have had more dissatisfying experiences in the service. Rather, they are differentiated from adjusted men primarily in how they react to their dissatisfaction.

Thus, in addition to identifying organizational features that cause more problems for attriters than for adjusted men, this report also focuses on how attriters differ from adjusted men in handling their problems. As later chapters demonstrate, attriters can be distinguished from adjusted men on the basis of some organizational experiences. The point here, however, is that attriters' reactions to unsatisfactory experiences may be as important as the actual experiences.

The principal findings concerning the attrition process are:

- Most attriters in the fleet intentionally contribute to their attrition by going UA.
- The attrition of recruits more often results from their inability to adjust to unexpected demands.
- Only about 10% of regular duty attriters go UA with the intention of being attrited after first seeking to be discharged via appropriate procedures.
- Men with problems do not usually receive counseling. However, about 40% of attriters who did not receive counseling think it would have helped them (Tables 4 and 5).
- Most attriters feel justified in prematurely terminating their service duty.

The obvious implication of these results is that there is a need for some mechanism whereby a dissatisfied man can obtain counseling. This counseling should be geared primarily toward assisting the man with his problems and only secondarily toward trying to convince him of his contractual obligations. It should attempt to prevent the disgruntled serviceman from going AWOL, for once he does this he has, in a sense, made a psychological commitment to be attrited. This prevention would best be accomplished by demonstrating to the man that there is a responsible person or unit available which will investigate his complaints. Even though in many cases this

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counseling agent may not be able to direct any changes, the mere demonstration of willingness to assist may be enough to dissuade potential attriters from leaving the service.

An analysis of the narrative given by attriters in relating their perception of the causes for their attrition indicates that many men had high rates of dissatisfaction prior to attriting. Furthermore, these results indicate that certain stated causes of attrition, such as conflicts with supervisors, act as "straws that broke the back." These men appear to have been highly susceptible to attrition and it did not take a great deal to push them over the edge.

### III. PRE-SERVICE FACTORS INFLUENCING ATTRITION

### III. PRE-SERVICE FACTORS INFLUENCING ATTRITION

#### A. Demographic Characteristics

This section examines the relationship between demographic characteristics and level of adjustment. The data are presented in two parts.

First, the effect of those demographic characteristics which are usually included in the enlisted men's record files are examined. These include such things as race, age, marital status and level of education. This presentation is intentionally limited in scope. It would be impractical and unreliable to attempt to describe "who" is attriting on the basis of a limited sample, only part of which was obtained through random probability selection. Such a description would be more reliable if it were developed from an EDP analysis of Marine and Navy personnel records.

The second part of the demographic analysis examines those characteristics not ordinarily included in the enlisted men's record files. Included here are such features as engagement status, socioeconomic status, and pre-service arrest record.

#### Demographics included in personnel records

Three demographic characteristics that have been consistently related to attrition are age, race, and educational attainment. Men who are younger, non-white, and/or not high school graduates have higher rates of attrition than their counterparts. The present research has also found higher attrition rates in these groups, but there are several aspects of these findings that deserve comment.

The difference in age at enlistment between attriters and adjusted is minimal. Within any one segment of the sample there was no more than eight-tenths of a year difference. Among men in the fleet, the attriters enlisted at a younger age than the adjusted men. However, among recruits the opposite is true; attriters, on the average, were older than adjusted recruits at the time of enlistment. This indicates that younger men have more adjustment problems in the fleet than in training.

Table 7

Age at Enlistment

Age	Recruits				Regular Duty			
	Marines		Navy		Marines		Navy	
	Adjusted Attriters %	Adjusted Attriters %	Adjusted Attriters %	Adjusted Attriters %	Adjusted Attriters %	Adjusted Attriters %	Adjusted Attriters %	Adjusted Attriters %
Under 18	40	41	35	19	35	45	16	34
18 or 19	52	41	52	51	48	40	55	47
20 or over	8	18	14	30	17	16	29	19
Average	19.0	18.4	18.3	19.1	18.3	18.2	18.9	18.5
N	(50)	(100)	(60)	(120)	(100)	(291)	(120)	(244)

Blacks in the sample have higher rates of attrition than whites; however, much of this racial difference is due to factors other than race per se. For example, blacks generally have less preparation and are less likely to attend a training school. Both of these factors in themselves affect satisfaction and likelihood of attriting. In the regression the independent effect of race is very small (see Appendix A).

Overall, 15% of adjusted men in the sample were black, compared to 21% of the attriters. A complete discussion of differences between blacks and whites will be presented in Chapter VII.

Level of educational attainment is one of the most important factors influencing attrition. Men having less than a high school education have a much greater probability of attriting than men who graduated from high school. This is true for every group. Among marines in the fleet, it is the single most important factor (see Appendix A).

Educational attainment is important for several reasons. First, it is highly correlated with other pre-enlistment factors such as forethought and participation in the delayed enlistment program. Secondly, it affects the man's opportunity to go to a training school. Thirdly, and perhaps most importantly, failure to complete high school may be indicative of a personality that has difficulty adjusting to organizational rules and communicating personal problems and needs.

The effects of low educational attainment are felt most heavily among marines in the fleet and recruits in the Navy. As will be shown later, the former group is dissatisfied because they feel their skills are not being utilized, while the latter group is dissatisfied because they do not have the skills necessary to meet the academic requirements. Contrary to what was expected, blacks in the sample were slightly more likely than whites to have a high school diploma. The figures for these results are presented in Tables 8A and 8B.

Two other demographic characteristics having some relationship to attrition are the size of the serviceman's home town and his marital status. Generally speaking, men from less populated towns are less likely to attrite. Overall, 43% of the adjusted men interviewed come from small towns, but only

Table 8A  
Education by Attrition Status and Service

<u>Education</u>	<u>Marines</u>				<u>Navy</u>			
	<u>Recruits</u>		<u>Regular Duty</u>		<u>Recruits</u>		<u>Regular Duty</u>	
	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>
Less than High School	26	34	32	66	7	44	18	46
Completed High School	66	55	57	30	75	51	59	47
Some College	<u>8</u>	<u>10</u>	<u>11</u>	<u>4</u>	<u>18</u>	<u>5</u>	<u>23</u>	<u>7</u>
Total	100	99	100	100	100	100	100	100
N	(50)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Table 8B  
Percent of High School Graduates by Race\*

	<u>Adjusted</u>	<u>Attriters</u>
White	80% (203)	50% (247)
Black	85% (34)	58% (69)

\* Numbers in parentheses are the number of respondents included in that category. In this table, other minorities such as Spanish speaking and Filipinos are not included.



35% of the attriters do. This relationship holds regardless of the respondent's race or education.

Marital status is related to attrition only for Navy regular duty men. Among sailors in the fleet, 14% of the adjusted are married, compared to 32% of the attriters. Among recruits and marines in the fleet, the differences are insignificant. These findings are shown in Table 9.

Table 9  
Percent Married

	<u>Recruit</u>		<u>Regular Duty</u>	
	<u>Marine</u>	<u>Navy</u>	<u>Marine</u>	<u>Navy</u>
	%	%	%	%
Adjusted	6	7	33	14
Attriters	9	11	32	32

Demographics not included in personal records.

Pre-service employment experience does not appear to be related to attrition. Servicemen not employed in a full-time position prior to enlisting are not more likely than employed men to become attriters. About 60% of attriters and 64% of adjusted men were unemployed before coming into the service (most, of course, are recent high school graduates). From the known composition of the sample, further examination reveals that of the approximately 610 servicemen not working full time prior to enlistment, 400 or 65.3% became attriters; whereas of the approximately 385 who were working full time, 267 or 69.9% became attriters. These facts along with the reasons given for enlisting (e.g., see Table 17) tend to refute any suggestions that attriters are more likely than adjusted men to enlist solely to seek relief from unemployment.

Family background does have some relationship to attrition. Attriters more often come from homes where the parents are no longer living together. In most cases this is a result of divorce, but it also results from the death of one or both parents in about one-third of the families. Marines more often than sailors come from incomplete families.

Table 10  
Family Composition of Attriters and Adjusted

	<u>Marines</u>		<u>Navy</u>	
	<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
	%	%	%	%
Parents alive and together	65	48	76	55
One or both parents dead	9	20	10	20
Parents divorced or separated	<u>26</u>	<u>31</u>	<u>12</u>	<u>25</u>
Total	100	99	98	100

(Data combined for recruits and regular duty)

Compared to adjusted men, the attriter's family is more often of a lower socioeconomic status. Fathers and mothers of attriters are less likely to have completed high school. The attriter's father, when present, is also more likely to be in a lower status occupation.

Academic performance appears to be related to attrition. Based on the belief that high school completion may not, in itself, be an adequate indicator of performance, it was decided to obtain other measures of academic performance. One measure was to ask respondents what their grade average had been in school, and the other was the interviewer's judgment of whether or not the respondent had reading difficulty. (During the course of the interview, respondents were asked to read items to the interviewer from lists provided.)

Both measures indicate that attriters have a worse academic performance than adjusted men. In the course of interviews, attriters more often than adjusted men said their grade average had been a C, D or F. This is especially true of Navy recruit attriters. On the basis of the interviewers' judgments, attriters more often than adjusted men have reading difficulties. (No measurements of the reliability of these interviewer's reading ability judgments were made.) Again, this is especially true of Navy recruits. The results are presented in Table 11.

These data indicate that, although the Marines have a higher percent of non-high school graduates than the Navy, the Navy may actually be attracting (or recruiting) men who are more deficient in academic skills.

Table 11

Academic Performance of Respondents

	<u>Recruits</u>				<u>Regular Duty</u>			
	<u>Marines</u>		<u>Navy</u>		<u>Marines</u>		<u>Navy</u>	
	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>
Percent with C, D or F average	50	63	32	77	44	52	45	54
Percent having difficulty reading	4	13	-	30	2	8	3	2
N	(50)	(100)	(60)	(120)	(100)	(201)	(120)	(244)

Pre-enlistment arrests are more common among attriters than adjusted men. Overall, about 8% more attriters in the study said they had been arrested prior to enlisting in the service. The Navy and Marine Corps have almost the same proportion of men with pre-enlistment arrests. Among those previously arrested, attriters are also more likely than adjusted, 78% vs. 72%, to say a waiver was required for them to enter the service. Thus, men having arrest records are a higher risk to attrite, but this factor alone does not account for a large amount of the differences between attriters and adjusted men.

Table 12

Percent Having Pre-Service Arrests

<u>Marines</u>		<u>Navy</u>	
<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
21	29	18	26

(Data combined for recruits and regular duty)

B. Enlistment Preparation

The amount of preparation for military service was measured in several ways. Respondents were asked how much forethought they gave to their enlistment, how much information they received from recruiters, and how much they discussed their decision with parents and others.

The results clearly demonstrate that preparation for military service is related to attrition and that many attriters are inadequately prepared for military service at the time of enlistment.

Attriters frequently enlist impulsively. When asked how long prior to their enlistment date they first considered enlisting, over 50% of all attriters interviewed, but only about 23% of adjusted men said it had been one month or less. Even though most of the men giving little forethought to their enlistment are non-high school graduates, the effect of inadequate preparation on attrition is still felt when education is controlled in the analysis. That is, it was found that even among men who are high school graduates, those who enlist impulsively are far more likely to attrite. The effect of enlisting impulsively is felt in the fleet as well as in recruit training. Table 13 below summarizes the results for recruits and regular duty men.

Table 13

Percent Giving One Month or Less  
Forethought to Enlisting

	<u>Marines</u>		<u>Navy</u>	
	<u>Recruits</u>	<u>Regular Duty</u>	<u>Recruits</u>	<u>Regular Duty</u>
Adjusted	22	35	13	21
Attriters	<u>52</u>	<u>55</u>	<u>49</u>	<u>50</u>
Differences	30	20	36	29

Participants in the Delayed Enlistment Plan have significantly lower rates of attrition than non-participants. Although most men involved in this program also gave sufficient forethought to enlisting, this program alone generally serves to reduce attrition. For some unexplained reason, this aspect of pre-service preparation loses its effectiveness for sailors once they go into the fleet. Even though the program is more popular among high school students, its effect is felt even among school dropouts. Table 14 below shows the effect for each educational group.

Table 14

Percent Involved in Delayed Enlistment Plan

<u>Education</u>	<u>Recruits</u>			
	<u>Marines</u>		<u>Navy</u>	
	<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
Less than high school	46% (6)	29% (10)	75% (3)	27% (14)
High school graduates	94% (34)	61% (40)	82% (46)	36% (24)

<u>Education</u>	<u>Regular Duty</u>			
	<u>Marines</u>		<u>Navy</u>	
	<u>Adjusted</u>	<u>Attrited</u>	<u>Adjusted</u>	<u>Attrited</u>
Less than high school	44% (14)	34% (45)	19% (4)	18% (20)
High school graduates	69% (46)	36% (25)	34% (34)	35% (24)

Attriters are no more influenced by family, friends or relatives than are adjusted men. Respondents were asked with whom they talked about enlisting, and what kinds of reaction they received from these people. Surprisingly, there is no indication that attriters confide less in their parents than do adjusted men; nor is there any evidence that attriters' parents are less agreeable than parents of adjusted men to their sons' decision to enlist.

One apparent exception to the absence of interpersonal influences on attrition is the effect of enlisting on the Buddy Plan. It was found that recruit attriters are less likely than recruit adjusted to have enlisted on the Buddy Plan. This effect is independent of the forethought given to enlisting. Apparently, having a friend in the same recruit training unit serves as a support to remain in the service. This conclusion is supported by the fact that the effects of Buddy Plan enlistment are not present for men after they have been separated from their enlistment partner in the fleet. The results are presented below.

Table 15  
Percent Enlisting on the Buddy Plan

	<u>Recruit</u>		<u>Regular Duty</u>	
	<u>Marine</u>	<u>Navy</u>	<u>Marine</u>	<u>Navy</u>
	%	%	%	%
Adjusted	39	27	27	14
Attriters	<u>25</u>	<u>16</u>	<u>30</u>	<u>15</u>
Differences	14	11	-3	-1

At the time of enlistment, recruit attriters were less confident than adjusted men of completing their service obligation. Over one-third (38%) of attriter respondents said they had some doubts at the time of their enlistment that they would actually complete their enlistment obligation. Only about 10% of the adjusted men felt this way. There are no differences between Marine and Navy respondents on this issue.

Attriters were asked if, at the time they enlisted, they had known anyone who terminated their military service prior to completion of their obligated term of service. Twenty-three (23%) of Marine and 28% of Navy recruit attriters answered affirmatively. Hence, nearly one out of four attriters realized at the time of service entry that attrition is a realistic alternative to completing their obligation.

More attriters than adjusted men feel they received incomplete information from recruiters. Approximately 55% of recruit adjusted men, compared to only 28% of recruit attriters, said the recruiters' description of recruit training was generally complete.

The reasons for these differences were not fully explored in the interviews. It could be, of course, that the attriters do not take the time during their impulsive enlistment process to make inquiries of the recruiter. On the other hand, it could be that the recruiter volunteers only information that appears attractive to the enlistee. About 20% of all recruits interviewed (attriters and adjusted) said what they were told was "a lie."

It is interesting to note what recruits remember being told by recruiters, because the organizational factors cited most often as causes of attrition (see Table 15) are among the factors about which recruits said they were told the least. These include the daily training schedule and harassment they might receive from superiors. Table 16 lists the percentage of recruit attriters and adjusted men interviewed who said they were told about each item by their recruiter. These items were precoded; that is, the items were provided on a list and the respondent merely indicated yes or no -- they were, or were not told -- for each item.

When asked what other factors they were not informed about, many recruits mentioned the fast pace of training and, among Navy recruits, the amount of classroom work involved in training.

When respondents were asked if they contacted the recruiter first or if the recruiter contacted them first, attriters were as likely as adjusted men to say they themselves made the first contact. Attriters in the study were also as likely as adjusted men to say they talked to more than one recruiter before enlisting. Hence, there is no evidence indicating that recruiting procedures result in contacting more "attrition-prone" than adjusted men. On the other hand, there is evidence indicating that attriters are less informed, and possibly more often misinformed, than adjusted men.

Many attriters feel that recruiters are responsible, at least in part, for the problems they are now having. During the interviews some suggested that if they had been fully informed, they may not have enlisted. A few quotes from the interviews illustrate how the study respondents reacted.

"I was not told that I would not be able to use the bathroom the times I needed. Recruiter didn't tell me about the mental strain and harassment. I was being treated as a child instead of as a man or even a human being. I was also supposed to get an education in boot camp during training." (Marine Recruit)

"He did not tell me completely about Physical Training and made it look light. Had I been told how boot camp really was, I might have thought twice before signing up. The recruiter never told me that if I have trouble reading, I would be put back and have to stay here longer." (Navy Recruit)

"The recruiter never told me that we might not get the schooling he had promised. He didn't warn us about the constant harassment, the beatings up. He also didn't mention that we had to sign a paper at the end of recruit training, stating that we had not been mistreated." (Marine Regular Duty)



Table 16

Percent Told about Each Factor by Recruiter

<u>Factors</u>	<u>Marine Recruits</u>		<u>Navy Recruits</u>	
	<u>Adjusted</u> %	<u>Attriters</u> %	<u>Adjusted</u> %	<u>Attriters</u> %
The procedures for making a complaint about one of your supervisors	16	14	18	4
The daily schedule followed in recruit training	24	14	32	8
The types of behavior that could lead to discharge	48	22	25	9
The harassment you might get from supervisors	58	31	38	15
The type of discharge received if someone is dismissed for bad behavior	52	29	25	19
The amount of physical exercise and conditioning in training	70	47	58	27
The procedures for applying to a school	40	36	70	44
How much pay you receive on reaching grade E-3	68	46	75	45
The purpose of the battery of classification tests that you took at the start of training	82	54	87	51
The type of duty assignments available after recruit training	80	67	70	59
The number of weeks of recruit training	94	84	90	87
N	(50)	(100)	(60)	(100)

Multiple responses possible

### C. Reasons for Enlisting

Attriters and adjusted men express similar reasons for enlisting in the service. Both groups interviewed said their priorities when they enlisted were to learn a skill and to be independent. Sailors also expressed a desire to travel, and Marines wanted to prove they were good enough. The reasons are consistent with current recruiting advertising appeals.

Although attriters and adjusted men each rank "learning a skill" as the number one reason for enlisting, attriters, especially in the Navy, are less likely to sign-up for a school. This is an apparent indication that the attriter has an inaccurate perception of the planning and preparation necessary for obtaining desired occupational training in the service.

Listed in Table 17 are average importance ratings given to a list of precoded reasons. The information is presented for recruits only. The higher the score, the less important the reason was in influencing enlistment. The table illustrates that, although adjusted men give higher importance ratings than attriters to almost everything, the two groups give about the same ranking to each factor.

### D. Summary and Implications

In summary, certain aspects of pre-service preparation are clearly related to attrition. Men who enlist impulsively, without sufficient information about what is available and what to expect, and who are not sufficiently confident about completing their enlistment obligation run a high risk of becoming attriters. The risk is highest at the recruit stage, but effects of inadequate preparation are still felt among men in the fleet.

Table 17

Average Importance Ratings of Reasons for Enlisting\*

<u>Reasons</u>	<u>Marine Recruits</u>		<u>Navy Recruits</u>	
	<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
The opportunity to learn a skill or trade in the Marines/Navy	1.3	1.6	1.2	1.5
The desire to be independent	1.8	1.9	1.7	1.9
The desire to prove you were good enough to be a Marine/Sailor	1.5	1.8	2.1	2.1
The opportunity to serve and defend your country	1.5	2.0	1.6	1.7
The opportunity to travel	2.0	2.2	1.6	1.8
Wanting to develop into more of a man	1.8	1.9	1.9	1.9
Wanting to spend some time in the service until you decided what you wanted to do in life	2.1	2.1	2.4	2.1
Things the recruiter told you	2.3	2.3	2.7	2.5
Not having a good job at the time	2.7	2.4	2.3	2.0
Wanting to be eligible for the G.I. Bill	2.5	2.6	2.3	2.5
Encouragement from your family or friends	2.8	2.6	2.5	2.3
N	(50)	(100)	(60)	(120)

\*Scores on importance rating:

- 1 = Very important
- 2 = Somewhat important
- 3 = Not very important
- 4 = Not important at all

#### IV. ORGANIZATIONAL FACTORS INFLUENCING ATTRITION

#### IV. ORGANIZATIONAL FACTORS INFLUENCING ATTRITION

##### A. Overview

Findings reported in Chapter III show that inadequate preparation for military service is highly correlated with attrition. The present chapter focuses on the effects of factors indigenous to the military itself. These organizational factors are examined for their independent influence on attrition, as well as their influence in combination with pre-military factors.

The order of presentation in this chapter reflects the importance of each factor in causing dissatisfaction and attrition. Here the measure of importance is based largely on the respondents' perceptions. According to respondents, the largest problem lies in the area of discipline and regimentation. Some men feel there are too many picayunish rules, while others feel they are victimized by unbridled abuses of power. Somewhat less important are the training programs and consequent duty assignments. Pay, rank, medical care, interpersonal relationships, and administrative problems are only infrequently perceived as causes of attrition.

##### Summary Tables

Following are six tables that summarize the respondents' view of causes of dissatisfaction and attrition. Since the chapter is organized by factors, presenting these tables together here serves two purposes. It avoids the necessity of reproducing them in part or in full each time a factor is discussed. It also provides an overview, or gestalt, of the relative importance of each factor in the attrition process. The regression analysis in Appendix A also includes several organizational variables.

Tables 18 and 19 compare attriters and adjusted men on their perception of causes of dissatisfaction. The first table summarizes the selections of recruits and regular duty men from a list of factors that are common to both groups. The second table summarizes selections made by men in the fleet from a more extensive list.

Tables 20, 21 and 22 summarize the views of attriters. Table 20 presents some of the factors and conditions that attriters feel contributed to their problem. These are more remote causes of their attrition. Table 21 lists factors that attriters consider more immediate causes of their attrition.

Not included in Table 21 are the actions for which attriters interviewed were being punished or discharged. Instead, the situations, incidents, or factors that, in the eyes of the attriter, are reasons why he misbehaved are listed. In the vast majority of cases, unauthorized absence was the last punishable offense committed by the respondent.

An example from one of the interviews will show how this coding was arranged:

(Marine Regular Duty Attriter) "My mother became very ill. I asked for permission to go home. The request was denied, so I went UA."

This marine's response would appear in both the "Family Problem" and the "Leave Request Denied" categories of Table 21.

Table 22 list attriters' responses to the question, "What changes would have to be made in the Marines/Navy in order for you to want to stay?" (The question was asked only of men who previously said they would prefer to leave rather than stay in the service). The changes suggested are largely consistent with the perceived causes of dissatisfaction and attrition.

#### B. Regimentation, Leadership and Discipline

This section covers three interrelated topics: regimentation, leadership and discipline. They are covered together because attriters interviewed often did not make distinctions among them.

Table 18

Primary Causes of Dissatisfaction among Recruits and Regular Duty

Factors	Recruits*				Regular Duty*			
	Adjusted		Attriters		Adjusted		Attriters	
	Marines	Navy	Marines	Navy	Marines	Navy	Marines	Navy
	%	%	%	%	%	%	%	%
Not enough free time each day	13	29	9	10	3	9	2	5
Not being able to leave the base to go home frequently	39	26	20	20	14	21	20	18
Strict rules and regulations	6	9	13	14	11	24	14	13
Harassment from superiors	23	15	38	30	35	32	41	38
Physical demands of training (Recruits)	13	6	8	6	X	X	X	X
Duty assignments had (Regular Duty)	X	X	X	X	25	10	7	11
Having no one to take your complaints to	6	15	12	20	11	4	16	14
Total	100%	100%	100%	100%	99%	100%	100%	99%
N	(50)	(60)	(100)	(120)	(100)	(120)	(201)	(244)

\* Percentage selecting each factor, from a precoded list.

Table 19

Factor Causing Most Dissatisfaction in the Fleet\*

<u>Factors</u>	<u>Regular Duty** Adjusted</u>		<u>Regular Duty** Attriters</u>	
	<u>Marines</u> %	<u>Navy</u> %	<u>Marines</u> %	<u>Navy</u> %
Supervisors' attitudes	11	9	21	27
Job training	7	2	9	8
Daily schedule	7	X	3	X
Life aboard ship	X	6	X	15
Pay	6	8	12	5
Social life	27	7	9	5
Treatment of dependents	3	6	8	6
Pride in the Marines	3	X	8	X
Way civilians treat you	X	19	X	6
Opportunity to travel	8	X	5	X
Shipboard assignment	X	2	X	8
Ability to change duty stations	16	7	7	5
Work assignments (on shore)	2	3	6	4
Medical care and services	2	3	4	5
Rank	7	7	7	2
Dress regulations	-	19	-	3
Friendliness of men in unit	-	1	1	-
Total				
N	99%	99%	100%	99%
	(100)	(120)	(201)	(244)

\* Percentage selecting each factor from a precoded list.

\*\* X indicates the item was not listed on the questionnaire version used for that sample group.



Table 20

Conditions that Contributed to Attriters' Problems\*

<u>Conditions</u>	<u>Recruit Attriters</u>		<u>Regular Duty Attriters</u>	
	<u>Marines</u>	<u>Navy</u>	<u>Marines</u>	<u>Navy</u>
Being harassed	50	40	73	66
Being criticized for making a mistake	57	54	67	52
Too much physical training	18	25	X	X
Too little free time	40	53	34	53
Being denied a request	35	33	58	52
Disagreement with men in the unit	25	29	40	62
Being falsely accused	43	33	52	21
Difficulty with classroom work	34	70	X	X
Dissatisfaction with assignment	X	X	67	43
Family problems	X	X	65	69
Other conditions	13	5	3	2
N	(100)	(120)	(201)	(244)

\* Percentage selecting each factor from a precode<sup>1</sup> list.  
Multiple response possible.

Table 21

Attriters' Perception of the Causes for Their Attrition

<u>Perceived Causes*</u>	<u>Recruit Attriters</u>		<u>Regular Duty Attriters</u>	
	<u>Marines</u>	<u>Navy</u>	<u>Marines</u>	<u>Navy</u>
Family problems	5	7	39	30
Supervisors' improper action	33	28	32	43
Change in attitude toward service	17	29	33	43
Regimentation	13	32	16	44
Fast pace	25	38	6	12
Promises not fulfilled	5	7	19	40
Classroom problems	12	66	-	2
Being falsely accused	7	7	17	14
Physical training	12	17	-	-
Leave request denied	-	1	12	17
Drugs/alcohol	3	-	13	22
Discharge request denied	2	1	11	7
Administrative problems	1	-	13	8
Personality conflicts	5	10	6	5
Transfer request denied	3	-	2	11
Other	1	-	2	6
N	(100)	(120)	(201)	(244)

Multiple response possible.

\* Codes developed from responses to open-end question.

Table 22

Changes that Would Induce Attriters to Stay In Service

<u>Ease Rules*</u>	<u>Recruit Attriters</u>		<u>Regular Duty Attriters</u>	
	<u>Marines</u>	<u>Navy</u>	<u>Marines</u>	<u>Navy</u>
Change supervisors' attitudes	24	20	16	28
Better treatment of enlisted men	24	14	11	16
Better job assignment	8	6	22	25
Increase pay and benefits	6	7	13	24
Better job training	1	7	7	6
Better treatment of dependents	-	-	5	5
Change tests and schooling procedures	-	15	-	-
Faster promotions	-	1	3	6
Less physical training	7	7	1	-
More lenient punishment	4	7	2	2
Change recruiting procedures	2	2	1	5
Shorter training period	2	3	-	-
Change uniforms	-	-	-	5
Miscellaneous other changes	4	7	10	4
Would not want to stay	13	17	36	29
Changes not needed/I am at fault	12	16	4	2
N	(100)	(120)	(201)	(244)

Multiple response possible.

\*Codes developed from responses to open-end question.

Issues related to discipline cause more dissatisfaction among attriters than any other organizational factor. No matter which attriter group is examined, or no matter what way the questions are worded, discipline stands out as the factor causing the most problems. In some cases it functions more as a remote influence, causing dissatisfaction. In other cases, however, it functions as the "straw that breaks the back" of the dissatisfied man and is mentioned as a cause of attrition. Sometimes attriters feel they are just not suited for a regimented way of life. In other cases, attriters feel they are subjected to unjustified discipline. A summary of reactions toward discipline-related issues will show how important this feature is for the different groups.

- Military discipline is a problem for both adjusted men and attriters (see Tables 18 and 19)
- Harassment from superiors is more often selected as problem for everyone than are strict rules and regulations (Table 18)
- Harassment from superiors is more often selected as a problem for regular duty men than for recruits (Table 18)
- Supervisors' attitudes are mentioned by men in the fleet as the primary cause of dissatisfaction twice as often as any other factor (Table 19)
- Feeling harassed and being criticized are leading among factors selected as contributing to attriters' problems (Table 20)
- About one-third of all attriters suggest that an improper action of their supervisor caused their attrition. (Table 21)
- In recommending changes to be made that would make them stay, recruits most often mention supervisors' attitudes and better treatment of enlisted men. These factors were also mentioned frequently by men in the fleet (Table 22).

Men complaining about rules and regulations generally do not specify particular rules. Rather, they feel there are just too many rules. An exception to this is Navy adjusted men in the fleet. These men very frequently complain that dress regulations are too strict.

Respondents were not asked specifically what complaints they had against their supervisors. However, from the narratives explaining the causes of their attrition, the following examples were extracted. They indicate the type of complaints expressed by some attriters. They felt their supervisors:

- Are lazy and make the men do all the work
- Frequently get drunk or moody and physically or psychologically assault the men
- Play favorites in assigning duties and issuing leaves
- Do not permit complainers to see the commanding officer
- Are vindictive toward men who complained about them
- Stigmatize men who have been in trouble before
- Are prejudiced
- Do not sympathize or try to help men with their personal problems

Problems with superiors are frequent causes of dissatisfaction which in turn become causes of attrition because some men often see going AWOL as the only way to alleviate the problem.

The perceived unlikelihood of having complaints handled satisfactorily is markedly related to attrition. Most men feel the system favors supervisors to the disadvantage of the enlisted men, but attriters actually feel the system works against them.

One measure of attitude in this area was obtained by asking respondents what would happen if they made a legitimate complaint about their supervisors. The results indicate that attriters, especially in the fleet, feel they would only be causing themselves more problems by complaining about this question. (Six percent of Marine recruit adjusted men said "Don't know.")

Table 23

Perceived Results of Complaining About Supervisors

<u>Results</u>	<u>Recruits</u>				<u>Regular Duty</u>			
	<u>Marines</u>		<u>Navy</u>		<u>Marines</u>		<u>Navy</u>	
	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>	<u>Adj.</u>	<u>Attr.</u>
Supervisors reprimanded, and nothing happen to me	48	18	68	15	30	8	27	8
Supervisor reprimanded, but I would be harassed	32	46	23	25	29	27	44	27
Nothing happen to supervisor, but I would be harassed	14	36	8	58	40	65	28	65
Don't know/other	<u>6</u>	<u>--</u>	<u>--</u>	<u>2</u>	<u>--</u>	<u>--</u>	<u>2</u>	<u>--</u>
Total	100	100	99	100	99	100	101	100
N	(50)	(100)	(60)	(120)	(100)	(201)	(120)	(244)

This item was included in the regression analysis. It shows a strong independent effect for most of the groups. Its largest effect is felt among sailors in the fleet, which is consistent with findings from the narratives about the attrition process. A few examples will serve to show how this attitude can lead to attrition.

"He said he saw me smoking marijuana and he was lying through his teeth, but he was a "lifer" and, although he couldn't prove it, they took his word for it and bounced me off the sub onto a surface vessel. I hated it there so I went UA."

"Everytime he (supervisor) came back on ship from shore he would be drunk and start harassing me. He wou

keep it up all night. When I put in a chit, to see the XO he would throw it away. Finally, I couldn't take any more so I went UA."

A sizable number of the men interviewed said that their supervisors had actually committed an offense that should have been reported. This was more common in the fleet where over 60% of attriters and over 40% of adjusted men said this. However, less than one-half of these men made a complaint. Most of those who did not complain said it would be nonproductive or even detrimental to do so. Among those who did complain, only about 15% of attriters and 35% of adjusted men felt their complaint was handled satisfactorily. Nearly 75% of attriters and over 50% of adjusted men who complained said they were harassed for doing so.

Overall, of those men who originally said their supervisors had done something which should have been reported, the percent who then complained, and who felt the complaint was handled satisfactorily is only 4% for attriters and 7% for adjusted men. This means, in effect, that only 5% of enlisted men feel they have satisfactorily used the military administrative system to handle problems associated with supervisors.

Most attriters said they would prefer to go directly to the commanding officer rather than use the prescribed chain of command to express a complaint against their supervisors. Among adjusted men, recruits and sailors in the fleet preferred to use the chain of command, but regular duty marines did not. Navy recruit attriters prefer to use the Human Relations Council. These results are presented in Table 23A.

Table 23A  
Preferences for Complaints Procedure

<u>Preference</u>	<u>Recruits</u>				<u>Regular Duty</u>			
	<u>Marines</u>		<u>Navy</u>		<u>Marines</u>		<u>Navy</u>	
	<u>Adj</u>	<u>Attr</u>	<u>Adj</u>	<u>Attr</u>	<u>Adj</u>	<u>Attr</u>	<u>Adj</u>	<u>Attr</u>
Use chain of command	58%	29%	67%	39%	43%	23%	64%	34%
Go directly to commanding officer	42%	70%	17%	22%	57%	77%	36%	65%
Go to human relations council	x	x	17%	36%	x	x	x	x
Don't know	-	1%	-	3%	-	-	-	1%
Total	100	100	101	100	100	100	100	100

Several men in the fleet pointed out the perceived "Catch 22" type of dilemma in trying to use the chain of command. As one marine put it:

"If you have problems with your sergeant, what are you supposed to do? If you tell him you want to see the captain about the problem, he refuses to let you."

In light of what has been mentioned above and in the previous chapter, the behavior of many of the attriters becomes more comprehensible. Their tendency to act impulsively, coupled with their nonacceptance of standard complaint procedures, leads them to resolve interpersonal conflicts by going AWOL.

### C. Training Programs

This section consists of two parts. The first part examines the effects of various aspects of recruit training programs while the second part examines the effects of training school programs.

#### Recruit Training

In Chapter III, it was mentioned that many recruits, especially attriters, feel they were not fully informed by their recruiters about the recruit training program. This is one reason why nearly two-thirds of all recruits said training was different from what they had expected. Surprisingly, many adjusted recruits interviewed said training was easier than expected. For those who said it was different, and more difficult, the three aspects mentioned most frequently as being unexpected were:

- Regimentation
- Fast Pace
- Behavior of Supervisors

In general, the aspects of training that were least expected are also the ones which presented the most problems.



Among Navy recruit attriters, the most frequently cited problems are difficulty with classroom work and the fast pace of training. From Tables 20 and 21 it can be seen that 70% of attriters interviewed said difficulty with classroom work was a condition that contributed to their problem, and almost as many, 66%, said classroom problems were directly involved in their attrition.

For most of these men, classroom problems and pressures lead to other problems such as conflicts with company commanders or changes in attitudes toward the service. However, a few of these attriters feel their problems were due solely to classroom failures. Although the sample selection criteria emphasized misconduct rather than academic problems, to obtain the total number within the allotted time it was necessary to obtain some attriters whose principal problem was academic in nature. This, however, represents a small number of cases and their inclusion in the sample does not diminish the importance of classroom difficulties as a source of other problems, especially loss of interest, apathy, and criticism from company commanders.

Marine recruits most often cite problems with their drill instructor as their attrition cause. These men feel they were unnecessarily harassed in being unduly criticized for a mistake or in being falsely accused of doing something wrong (see Tables 20 and 21).

The importance of the supervisor-enlisted man relationship is emphasized by the fact that 48% of Marine and 34% of Navy recruit attriters interviewed said they would be willing to stay in the service if there was either a change in their supervisors' attitudes or if the service treated them properly. Fifteen percent of Navy attriters mentioned they would like changes in schooling procedures. Besides these two, there were no other changes recommended by more than eight percent of recruit attriters interviewed in either service.

#### Training School Programs

Although the analysis of the influence of training school is limited because the Navy adjusted sample was drawn from training schools, there is enough information available from Marines, attriters in the Navy, and recruits to provide some generalizations. Most evidence indicates that training school programs function to reduce attrition.

Recruits who sign up for a training school at enlistment are less likely to attrite than recruits who do not sign up for a school. Of course, most of the men who sign up for school are also the ones who give adequate forethought to enlisting and were in the delayed enlistment program. However, planning to attend a training school does, in itself, act as a deterrent to attrition. Table 24 shows the large differences between adjusted men and attriters. This is also a variable included in the regression analysis along with the variable of high school education. Hence, the importance of signing up for a training school remains intact regardless of the recruit's educational background.

Table 24

Percent Enlisting for a Guaranteed School

<u>Marine Recruits</u>		<u>Navy Recruits</u>	
<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
56%	37%	82%	27%

It will be recalled that the desire to learn a skill is given as the primary motivation for enlisting by both adjusted men and attriters. On the basis of the above finding, it is evident that attriters have a misconception about the nature of school assignments. In fact, a sizable number of recruit attriters interviewed said they were surprised to learn they were not going to the training schools they had expected to attend. These expectations were based largely on verbal promises understood to have been made by the recruiters and, in a few cases, the belief one could choose any school after enlisting. About 5% of recruit attriters interviewed said a factor causing their attrition was the realization they were not going to obtain the school training they expected. This problem is more acute, however, in the fleet.

Many attriters in the fleet say failure to obtain expected school training is a reason for their attrition. This problem is more common among sailors than among marines. Forty percent (40%) of attriting sailors and 19% of attriting marines interviewed reported that their promises had not been fulfilled, and although some of these promises pertained to duty station assignments, in most cases the promises pertained to training schools.

Training school attendance is related to attrition in the Marine Corps but not in the Navy. Only 52% of Marine attriters, compared to 81% of Marine adjusted men, attended a training school. In the Navy, 61% of attriters attended a Class A school. Since the latest estimate from PERS-55 indicates that between 56% and 65% of all men in the fleet attended a Class A school, it appears that potential attriters are as likely as adjusted men to attend school.

The differential importance in the two services attributed to training school attendance is accounted for by the relationship of school training to job assignment. Among the Marines interviewed, men who did not receive job-related training are dissatisfied because of this. Many sailors, on the other hand, are dissatisfied because their training led to a dissatisfying job assignment. The following comments typify the attitudes of many attriters.

"I came in the Marines to learn a trade. I could have stayed in the streets to learn to fight."

"I don't have a real job. I'm just a pick-up man."  
(Marine)

"I signed for Machinist Mate, but I get Boiler Technician and that's one of the worse jobs in the Navy. I'm leaving mostly for family problems, but I think if I'd gotten the school I signed for, I could've made it."

Attriters are more often dissatisfied with their job training. In the Marine Corps, attriters are almost twice as likely as adjusted men to express dissatisfaction with the training they received, while in the Navy the ratio is almost 3 to 1. Table 25 presents the results.

Table 25

Percent Dissatisfied with Job Training

<u>Marine Regular Duty</u>		<u>Navy Regular Duty</u>	
<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
32%	53%	18%	52%

Even though the majority of attriters express dissatisfaction with their job training, this was selected as the most dissatisfying factor by only 9% of Marine and 8% of Navy attriters interviewed.

In summary, job training, like several other factors already covered, functions in the attrition process primarily as a factor causing the enlisted man to be dissatisfied and rarely serves as a direct cause of attrition.

#### Physical Training Programs

Overall, physical training programs are not an important cause of dissatisfaction, and are only rarely cited as a cause of attrition. Most recruits expected to receive a certain amount of physical training as part of their program. The few recruits who did complain generally feel they were being driven too hard by their supervisor. Complaints about physical training are almost non-existent among men in the fleet.

#### D. Duty Assignments

Duty assignments are often a cause of dissatisfaction but they are rarely seen as directly responsible for attrition. When interviewed, attriters more often than adjusted men expressed dissatisfaction with their duty assignment. Rarely, however, did any attriters say they went AWOL or otherwise misbehaved solely because of intense dissatisfaction with an assignment.

One reason why duty assignments cause dissatisfaction is that expectations for them are very high. Recruit respondents said they consider it very important to have a satisfactory duty assignment and they believe most men in the fleet are happy with their assignments. Recruits assumed they would obtain the type of assignment they wanted and, although they realized they might not receive the location desired, they did expect to have an interesting social life wherever they were.

Different aspects of duty assignments cause disenchantment among different groups. In the course of interviews, Marines expressed greater dissatisfaction than did sailors with the social life where they are stationed (Camp Lejeune) and their inability to change duty stations. Sailors, on the other hand, said that life aboard ship, in general, and their shipboard assignments, in particular, are frequent causes of dissatisfaction.

Compared to adjusted men, attriters more often attempt to change their situation; however, they are less often successful in obtaining a change. A larger percentage of attriters apply for changes in duty stations and job assignments.

Among those who ever apply for a change, each attriter, on the average, applies more often than each adjusted man. Attriters also have their requests denied more often than adjusted men. On the basis of the figures presented in Table 26, it can be seen that about one-third of all attriters attempt to change their assignments before attriting.

Table 26  
Attempts to Change Duty Assignments

	<u>Marine</u>		<u>Navy</u>	
	<u>Adjusted</u>	<u>Attriter</u>	<u>Adjusted</u>	<u>Attriter</u>
Percent requested a change of duty station	26%	39%	20%	37%
Average number of times requested	2.8	2.9	2.0	2.6
Percent who ever had a request granted	40%	32%	43%	35%
Percent requested change in job assignment	25%	26%	25%	30%
Average number of times requested	2.0	2.3	1.5	2.3
Percent who ever had a request granted	50%	42%	77%	40%

Attriters' experiences with cruises, work schedules, and length of time in job assignments are similar to the experiences of adjusted men. In neither branch of the service do attriters have worse work schedules than adjusted men. Attriters interviewed rarely reported being overworked. Married attriters are the only group who complained frequently about scheduling. Their main concern, of course, is being separated from their spouse. The comparison of duty schedules is presented in Table 27.

Table 27

Comparison of Duty Schedules\*

	<u>Marines</u>		<u>Navy</u>	
	<u>Adjusted</u>	<u>Attriter</u>	<u>Adjusted</u>	<u>Attriter</u>
Cruises	0.6	0.6	2.7	2.9
Months in assignments	13	14	10	11
Nights per week on duty	1.1	1.8	1.8	2.0
Weekends per month on duty	1.1	1.5	1.4	1.6

\*All figures are group averages and for attriters pertain to assignments prior to being processed for discharge.

Most evidence indicates that attriters have less desirable jobs than adjusted men while they are in the service. If the jobs are not actually worse, at least they are perceived that way by the attriters. Table 19 shows that attriters are less satisfied with their assignments. Table 22 shows that change in job assignments would make a big difference to many attriters in their decision to leave the service.

Based on these data and the narratives obtained in the interviews, several conclusions can be made about the effects of job assignments.

- While they are in the service attriters are more often dissatisfied with their assignments and frequently attempt to change their situation.
- The dissatisfaction stems primarily from the task itself rather than the work schedule.
- Marine attriters consider their work tiresome and purposeless; sailors feel they work too hard when on a cruise.

- Discontentment with job increases the level of dissatisfaction but it does not, in itself, cause men to attrite.

The importance of job assignment location is covered in Chapter V.

#### E. Rank, Pay and Medical Care

As part of the effort to guarantee anonymity, no information concerning the respondents' rank or assignment was recorded. Hence, the importance of rank and pay in influencing satisfaction and attrition is based primarily on the opinions of respondents rather than on a comparison of actual ranks of attriters and adjusted men.

Since recruits had little experience with rank and pay, they were asked only about their expectations for the future importance of these. Thus, most information about the influence of pay and rank is based on the responses of men in the fleet.

Although many men express some dissatisfaction with their pay and rank, these are rarely cited as causes of attrition. Table 28 below lists the percentage of each group expressing dissatisfaction with their rank and their pay. As the data indicate, attriters, especially in the Marines, more often than adjusted men express dissatisfaction with these. However, neither factor is cited often by any group except Marine attriters (12%) as the most important factor causing dissatisfaction (see Table 19). Furthermore, only rarely is either rank or pay mentioned by attriters as a cause of their attrition.

Table 28  
Percent Dissatisfied with Rank and Pay

<u>Factor</u>	<u>Marine</u>		<u>Navy</u>	
	<u>Adjusted</u>	<u>Attriter</u>	<u>Adjusted</u>	<u>Attriter</u>
Rank	26%	58%	30%	40%
Pay	28%	52%	35%	39%

Since information on rank was not obtained it is difficult to determine why Marine attriters are more dissatisfied with their pay and grade than other groups. It is not that they had been demoted more often because Navy attriters questioned were equally likely to say they received punishments involving fines and rank reductions. Regardless of the reason, rank and pay are frequent causes of dissatisfaction for Marines in the fleet. Many of their other problems, such as poor social life and family financial problems, may be related to these factors.

Recruits believe that pay and rank will be very important for them when they are in the fleet. They also believe that men in the fleet are somewhat dissatisfied with their pay. This perception of the importance of pay and rank is consistent with the perception of most regular duty men. Thus, one's attitude toward rank and pay does not undergo changes as one moves through different stages of a military career.

Of all the organizational factors examined, medical care shows the least relationship to dissatisfaction or attrition. Medical care is considered a very important factor by both recruits and men in the fleet. About 80% of adjusted men and 70% of attriters questioned also said they are satisfied with the medical care available. This category received higher satisfaction ratings than any other factor examined. Overall, only about 4% of men in the fleet interviewed said they are more dissatisfied with medical care than any other factor (see Table 19). Only one or two respondents said their attrition is related to insufficient or improper medical care.

To point out that pay, rank and medical care are not frequent causes of attrition does not imply that they may not be important in preventing attrition. Considering the perceived importance of these factors, strong dissatisfaction with them would probably lead to much higher rates of attrition. In fact, there is evidence these benefits serve as trade-offs against some of the less desirable features of military life. For example, 24% of Navy and 13% of Marine regular duty attriters questioned said one change necessary for them to want to remain in the service would be an increase in pay.

Thus, it appears that increases in pay or promotions, or improvements in medical benefits, would result in some



slight reductions in attrition. On the other hand, any reductions in pay or any curtailment of medical benefits could very well lead to increased attrition rates.

#### F. Interpersonal Relationships

Interpersonal conflict with other men in the unit is not an important influence on the satisfaction or attrition of men in either branch of the service. Slightly less than 1% of all respondents said the unfriendliness of men in their unit causes them the most dissatisfaction (see Table 19). No one questioned attributed the cause of his attrition to interpersonal problems with other enlisted men in the unit.

Nearly 50% of each sample group said there are some enlisted men in the unit with whom they do not get along, but apparently most men managed to adjust to this because it was rarely mentioned as a major cause of dissatisfaction. Contrary to what one might expect, attriters are no more likely than adjusted men to have interpersonal conflicts.

The interpersonal conflicts generally revolve around issues of authority. Attriters, in particular, feel that men of slightly higher rank are being too authoritative and "pulling-rank" to do a lesser share of the workload.

#### G. Administrative Problems

Administrative problems do not affect recruits, but about 10% of regular duty men interviewed reported that administrative problems contributed to their attrition. Only a few men said they are attriting primarily because of an administrative problem. However, 13% of Marines and 8% of Navy regular duty men said it is a factor in their attrition. The most frequently mentioned problems were those concerning pay records.

Administrative problems function in two ways in the attrition process. Some men seem to cite these problems as a sort of justification for going AWOL;

that is, if the Corps/Navy does not pay them they do not have to work anymore. For other men who are already dissatisfied, these problems serve as a "last straw".

Often men having administrative problems are more angered because they feel no one is assisting them than because of the problem itself. The person they blame is usually their NCO. One marine attriter exemplifies this attitude.

"My wife was here and we had only \$50.00 every two weeks to live because my pay was messed-up. I told my staff sergeant twice I need the money to live on and if I don't get paid I will leave. He didn't do anything so I took my wife and child and left. I was AWOL for 9 months."

V. NON-MILITARY FACTORS INFLUENCING ATTRITION

## V. NON-MILITARY FACTORS INFLUENCING ATTRITION

### A. Family and Friends

Family needs and problems have a significant bearing on the attrition of men in the fleet. About one-third of regular duty attriters said the specific acts that led to their attrition were related to family problems or needs. Only about 6% of recruits interviewed said family considerations were involved in their attrition. Table 29 below lists the context in which the act or acts relating to attrition took place.

Table 29

#### Context of Reason for Attrition

<u>Context</u>	<u>Recruits</u>		<u>Regular Duty</u>	
	<u>Marine</u> %	<u>Navy</u> %	<u>Marine</u> %	<u>Navy</u> %
Not related to military or family	3	-	2	5
Related to family	5	7	39	29
Related only to military	80	84	52	66
Uncertain/no answer	12	8	7	--
Total	100	99	100	100
N	(100)	(120)	(201)	(244)

Family problems include marital difficulties as well as problems in the family or orientation. The most frequently mentioned family problems are illness of either a wife or a single parent. Other problems mentioned frequently include financial difficulties of wife or parents, home-sickness caused by separation from wife, and a need to assist a single parent in the care of a sibling.

Typically, men having these problems go on unauthorized absences for extended periods of time. In many cases the men seek and are denied leave, but in some cases they merely go home without seeking permission. It also happens frequently that men who have been granted leave feel they need a leave extension to handle their problems. Again, some seek it and are denied, while others merely take the time without seeking permission.

Although being UA to serve family needs may at first seem like a "good excuse" or rationalization, the explanation becomes more believable when one considers that most of these men come from one parent, lower socioeconomic status families. Some attriters report they had no particular complaints about the service but felt their family problem took precedence over military obligations. On the other hand, however, many attriters who said they went AWOL principally because of a family problem also mentioned a long list of grievances toward the service. For many of these men the family problem is merely an opportunity to feel justified in leaving an undesirable situation.

A few examples will illustrate how family problems are related to attrition. In the first example, the attriter's decision involves little more than prioritizing family needs over service obligations. In the second case, dissatisfaction with military procedures is involved.

"I would stay in if I could get shore duty. For married men, they should realize they have to see their wives and kids. Last year my ship was at sea 300 days."

"My wife had a baby. My battalion commander had promised me that I could return when my child was born if we were still in deployment area, and we were. But I was refused temporary leave. Thereupon, I jumped ship and took my wife and child to Atlanta and stayed there. You never get what they promise you."

In addition to being frequently mentioned as a specific cause leading to attrition, family problems were mentioned as a contributing factor by nearly two-thirds of all regular duty attriters interviewed.

Besides family problems, many attriters interviewed also suggested that separation from girlfriends and fiancées contributed to their dissatisfaction. This, however, was rarely cited as a major reason for attriting.

Marital status is related to attrition only among sailors in the fleet. As Table 30 below indicates, attriters in the Navy are twice as likely as adjusted sailors to be married.

Based on married attriters' accounts of the causes of their attrition, it appears that sailors' problems stem primarily from long separations, unexpected scheduling of cruises, and duty station transfers. Married marines, on the other hand, more often complain of living conditions in the area (Camp Lejeune), and the financial difficulties of maintaining a household.

Table 30

Marital Status and Attrition

<u>Marital Status</u>	<u>Marine Regular Duty</u>		<u>Navy Regular Duty</u>	
	<u>Adjusted</u>	<u>Attriters</u>	<u>Adjusted</u>	<u>Attriters</u>
Married	33%	32%	14%	32%
Engaged/Going with a girl	37%	43%	39%	34%
Unattached	<u>30%</u>	<u>25%</u>	<u>47%</u>	<u>34%</u>
Total	100	100	100	100
N	(100)	(201)	(120)	(244)

Attriters often believe they are encouraged by spouse or girlfriend to leave the service. Of the regular duty attriters who are either married, engaged, or going with a girl, about 75% said their female partners would prefer them out of the service. About 35% said they were actively encouraged by the females (and parents) to leave the service. Less than 10% said they were encouraged to remain in the service.

To reiterate, family and marital problems play a leading role in the attrition process. Most attriters, especially married ones, appear to feel guiltless about abandoning their military obligations to attend to family problems. For some of these men, family problems present a credible excuse to leave the service, but for others it is a matter of following their own convictions and sense of priorities.

No research technique, short of a polygraph, could classify attriters into the two different categories mentioned above. However, if one were to make an estimate based on the interview responses, the estimate would probably be that about one half of these men were motivated to leave the service primarily because of what they believed to be more important personal responsibility. This one-half of one-third translates into about 15% of all regular duty attriters.

The area of family problems is itself a difficult problem for the military not only because it is a big factor in attrition, but also because the men involved in these situations are more firm in their decision to leave the military. Only 12% of regular duty attriters who are married or engaged said they would prefer to stay in the service, compared to 26% of men not married or engaged. Of attriters who said the specific cause of their attrition is family related, 13% are willing to stay; this compares to 21% of those who mentioned other reasons for attriting.

Men who mentioned family problems as the primary reason for their attrition are among those most committed to leaving the service. This even includes those who are not dissatisfied with the service, but who feel their family needs have a higher priority.

#### B. Social Life

The social life in the fleet is a big disappointment to most men. Recruits in both of the services consider it important that, when they are in the fleet, they be stationed at a base where there are interesting things to do during off-duty hours. Furthermore, recruits generally believe that most men in the fleet have interesting things to do when they are off-duty. Unfortunately, most men in the fleet, including attriters as well as adjusted men, said the social life available to them is quite different from what they expected, and it is dissatisfying.

Although many men in the fleet, especially marines, express dissatisfaction with the social life, it is not perceived as a specific cause of attrition. Approximately 68% of marines and 37% of sailors in the fleet said they are dissatisfied with the social life available. The differences between attriters and adjusted men on this

issue are small. In fact, in selecting the one factor causing the most dissatisfaction, adjusted men more often mentioned the social life. No attriters attribute their problems solely to a poor social life, although some did say this factor contributed to their general malaise.

During interviews marines frequently complained about the base (Camp Lejeune) and their inability to change duty stations, while sailors complained about dress regulations and the way civilians treated them.

The role of social life in influencing attrition may be similar to the role of other factors examined in this study: namely, it functions primarily as a cause of dissatisfaction which sets the stage for the attriter's reaction to a more specific factor. There are several findings to support this possibility.

First, among men in the fleet, attriters go home more often than adjusted men, and they are far more likely to go without proper authorization. Secondly, attriters are less likely than adjusted men to have a car on base. (It is a reasonable assumption that having a car at Camp Lejeune or Great Lakes enhances one's opportunity for a more interesting social life.) Although this finding may be distorted somewhat by the fact that some attriters in the study were apprehended by the F.B.I. and delivered to base, it is doubtful if they could account for the large percentage differences. In addition, among the adjusted men, those who do not have a car are more often dissatisfied. Table 31 below presents the data on this factor.

Table 31

Percent Having a Car on Base

	<u>Marines</u>	<u>Navy</u>
Attriters	12%	16%
Dissatisfied Adjusted	51%	32%
Satisfied Adjusted	58%	36%



C. Employment and Educational Opportunities

Compared to adjusted men, attriters are only slightly less interested in obtaining additional education. Generally, about 85% of all interviewees said they expect to obtain some additional education. For each group except the Navy recruits, the differences in expectation between attriters and adjusted men are small. Among Navy recruits, only 66% of the attriters said they expect to receive more education, compared to 92% of the adjusted in this group. About 30% of all respondents who expect more education said they wanted to go to a technical school.

Thus, there is no indication that attriters are more interested than adjusted men in seeking educational opportunities. Additionally, from the interview responses there is no indication that men leave the service because of the unavailability of educational opportunities.

Opportunity, or lack of opportunity, for employment, does not have an overt influence on attrition. There is no difference in the reaction of attriters and adjusted men toward employment opportunities. In Chapter III, it was pointed out that attriters were as likely as adjusted men to have been employed prior to enlisting, and that not having a job was not an important reason for either group in their decision to enlist. Most recruit attriters (about 70%) said in interviews that if they had attended a service school it would have helped their opportunities for employment. However, most recruit attriters, as well as regular duty attriters, feel their civilian job opportunities are good anyway.

Although there could be an element of cognitive dissonance in the attriters' optimism concerning employment opportunities, the threat of unemployment does not appear to be a serious deterrent to the desire to leave the military. In fact, some attriters, especially those with family problems, said they went UA because they feel they could make more money in a civilian occupation.

Whether or not unemployment rates in the larger society have an effect on enlistment rates or attrition rates can not be determined by the present study. Such an analysis should be conducted using aggregate data. The findings herein indicate that, if such an effect exists, it is not pronounced in the minds of the men.

D. Drugs and Alcohol

Drugs and alcohol are cited as causes of attrition fairly often by regular duty men, but rarely by recruits. Approximately 22% of Navy and 13% of Marine regular duty attriters interviewed said drugs and/or alcohol are direct causes of their attrition, whereas only 3% of Marine and no Navy recruit attriters cited these causes.

VI. SUPERVISORS' OPINIONS AND RECOMMENDATIONS  
CONCERNING ATTRITION

# VI. SUPERVISORS' OPINIONS AND RECOMMENDATIONS CONCERNING ATTRITION

Relatively small samples of supervisors (see Table 1) from the same units as enlisted men respondents were interviewed. The questionnaires contained both precoded and open-ended questions. The issues covered were similar to those covered in the adjusted and attriter surveys.

Background information obtained in the interviews is summarized below in Table 32. Although the samples are too small to permit reliable generalizations, whenever pronounced differences in responses appear between supervisors having different background characteristics, these differences are noted.

Table 32

## Characteristics of Supervisors

	<u>Recruit Supervisors</u>		<u>Regular Duty</u>	
	<u>Marines</u>	<u>Navy</u>	<u>Marines</u>	<u>Navy</u>
Average age	27	34	29	31
Years in service	8.6	15.3	9.9	12.4
Percent with combat experience	47%	70%	74%	55%
Percent volunteered for training duty	73%	45%	X	X
Months experience as training supervisor	<12	34	X	X
Number of assignments as a supervisor	X	X	8.7	12
N	(15)	(20)	(35)	(40)

### A. Supervisors Perception of Attrition Causes

Most recruit supervisors believe that poor recruiting is responsible for most attrition of recruits. This is true of both drill instructors and company commanders. They feel the defects of recruiting are threefold: recruiters irresponsibly enlist men who should not be enlisted; most men are poorly prepared as to what to expect in training; and enlistees are given too many false promises.

In the other reasons mentioned, recruit supervisors attribute the problem to personal deficiencies of recruits as frequently as they attribute it to organizational factors. These supervisors, especially company commanders, have favorable opinions about the abilities of their peers, for they rarely cite bad leadership as a factor affecting attrition among recruits.

Among supervisors in the Navy, most petty officers cite poor preparation, while Marine sergeants frequently cite lax discipline and poor preparation, as root causes of attrition. In the Navy, petty officers have frequent experiences with discontented men who had expected to be at another place doing another job. Sergeants in the Marines also experience this to some extent, but their main concern is with the lack of discipline and the ease with which men are able to exit the service. Petty officers do not feel there is a lack of discipline in the Navy, but most feel attrition is caused, in part, by lack of self discipline and the immaturity of the attriter.

Approximately one-third of these supervisors feel that poor leadership is a main factor causing problems. This occurs, they said, because the supervisors themselves are not properly prepared for training men. Table 33 presents the supervisors' views on causes of attrition.

Drill instructors and company commanders feel recruits' preparation is most inadequate concerning details about the type of behavior that is punishable by discharge and the type of schedule followed in training. Few regular duty supervisors believe men coming into operating units receive sufficient instructions in recruit training. This is especially true of Marine supervisors. It is felt that the men are least prepared in regard to application procedures for change of job assignment or for training schools, and what arrangements are made for dependents' well-being. The majority of Marine supervisors believe recruits are taught enough about how to file a complaint against a supervisor.

In an effort to gain some understanding of why attrition is higher among less educated men, supervisors were asked if non-high school graduates are dissatisfied for different reasons than high school graduates. Approximately half of the supervisors said the causes of dissatisfaction are, in fact, different. They suggest that more educated men find service life easier because they are more ambitious and goal oriented, and are able to handle discipline and harassment more easily.

Table 33

Supervisors' Opinions of Factors Causing Attrition

	<u>Recruit</u>		<u>Regular Duty</u>	
	<u>Marine</u>	<u>Navy</u>	<u>Marine</u>	<u>Navy</u>
Poor preparation	60	90	34	65
Lack of self-discipline	27	30	29	58
Regulations too lax	7	10	37	18
Poor leadership	13	5	29	35
Training/job assignment	27	35	26	28
Conflicts with other men	-	10	11	10
Drugs and alcohol	7	5	6	5
Personal problems	20	50	11	20
Dissatisfaction with MOS	-	15	3	10
Other	-	-	6	13

Multiple response possible

B. Supervisors' Recommendations for Reducing Attrition

The topic of recommendations was handled in several ways. First, supervisors were asked what their policies are for handling troublesome men. Second, their opinion toward several current organizational policies and practices was solicited. Next they were asked to evaluate a number of suggested policy changes aimed at reducing attrition. Finally, the supervisors offered their own suggestions about how to reduce attrition.

Generally, supervisors in the fleet prefer to keep responsibility for troublesome men. Recruit supervisors are divided in their opinions on this. Nearly 75% of fleet supervisors said they would prefer to keep men with bad attitudes in their unit, as opposed to sending them to a special unit. Most of these supervisors said their current practice is to give men having bad attitudes more responsibility to see if this improves their attitudes.

Two-thirds (67%) of the drill instructors but only 40% of the company commanders said they would prefer to send men to special motivational units. About 50% of each group said they assign men with bad attitudes to leadership positions to see if this improves their attitudes.

The majority of supervisors interviewed said their units have had "rap sessions" and these sessions have been worthwhile. However, the respondents unanimously rejected a proposal for rap sessions which would involve only recruits and their commanding officers. There is even strong opposition to a suggestion of rap sessions involving only recruits and the unit's senior NCO. It is not determined why the supervisors are opposed to rap sessions which would not include them.

The majority of supervisors are not in agreement with the current Marine Corps/Navy policy for handling men who are behavioral problems. Exactly 60% of recruit supervisors in both services and exactly 70% of fleet supervisors in both services said they would like to see men handled differently.

The change recommended most frequently by recruit leaders is for more discipline. Very few suggest increased counseling or a more positive approach. In fact, 60% believe that more men should be attrited. However, NCO's in the fleet are split in their preference for positive and negative reinforcement. About 20% of these supervisors said there is a need for more counseling, and about 50% feel more men should be attrited.

Over 90% of supervisors favor requiring recruits with complaints to use the chain of command rather than allowing them to go directly to the unit's CO. This is obviously one Marine Corps/Navy policy that is widely favored by NCO's.

Concerning the issue of complaints, supervisors were asked what, in their opinion, best describes how enlisted men feel about making complaints against their supervisors. The answer choices presented were the same offered to recruits (see Table 23). Somewhat surprisingly, with the exception of drill instructors, the supervisors' responses are not too different from the responses of enlisted men. The supervisors' responses are presented in Table 34 below.

Table 34

Perceived Results of Complaining about Supervisors

<u>Results</u>	<u>Recruit Supervisors</u>		<u>Regular Duty Supervisors</u>	
	<u>Marines</u> %	<u>Navy</u> %	<u>Marines</u> %	<u>Navy</u> %
Supervisor reprimanded, and nothing happen to recruit	57	45	9	18
Supervisor reprimanded, but recruit would be harassed	21	10	54	40
Nothing happen to supervisor, but recruit would be harassed	14	40	34	40
Other/don't know	<u>7</u>	<u>5</u>	<u>3</u>	<u>3</u>
Total	99	100	100	101
N	(15)	(20)	(35)	(40)



Navy recruit company commanders are skeptical about the Human Relations Council and classes. Seventy-five (75%) percent agree the classes cause more problems than they solve. About 60% feel that they, the company commanders, should be given more input into what is covered in these classes. If it were their prerogative, half would discontinue the classes.

The dislike for the Human Relations Council is related to what is apparently perceived as their naivete. Eighty percent of recruit leaders believe that the Human Relations Council does not really understand how difficult a company commander's job is. Most, however, do not feel that the council is biased against company commanders.

Recruit supervisors believe that better recruiting would be the most effective way to reduce attrition. In answering both the open-ended and the choice selection questions, recruit supervisors almost unanimously agree that better screening of recruits for acceptable attitudes and mental abilities would greatly reduce attrition. (See Table 35A). Most also feel that they should be given more authority in deciding how troublesome recruits are handled. About half feel that stricter discipline standards would be effective in reducing the attrition of recruits.

A majority of supervisors in the fleet said attrition would be reduced significantly if job assignments were more interesting. Like the recruit leaders, most of these men feel that better screening of men before they come into the fleet would be an effective way of cutting attrition. Eighty-nine percent (89%) of Marine NCO's said attrition would decline if more men received school training to increase their job skills.

Supervisors generally do not agree that a reduction in harassment would lead to a reduction in attrition. Nor do they think that increased emphasis on rehabilitation and less emphasis on discipline would make a significant contribution. Contrary to expectations, recruit supervisors do not feel it would reduce attrition if they were given more responsibility for schedule planning. Tables 35A and 35B present the supervisors' reactions to suggested changes.

Table 35A

Recruit Supervisors' Evaluation of Suggested  
Changes for Reducing Attrition

<u>Suggested Changes</u>	<u>Drill Instructors</u>		<u>Company Commanders</u>	
	<u>Reduce Significantly</u>	<u>Reduce Slightly</u>	<u>Reduce Significantly</u>	<u>Reduce Slightly</u>
	%	%	%	%
Better screening by recruiters for proper attitudes of recruits	67	33	75	20
Better screening by recruiters for mental abilities of recruits	73	13	80	20
Discipline units put more emphasis on rehabilitation and less emphasis on discipline	-	14	5	30
Company commanders are given more authority to decide how problem recruits are handled	47	20	40	30
Less harassment of recruits	15	15	-	25
Company commanders are given more responsibility for schedule planning	-	13	10	15
The amount of friendly counseling for men with problems is increased	-	36	10	60
Discipline standards made stricter	47	7	35	20

Multiple Response Possible.

Table 35B

Regular Duty Supervisors' Evaluation of Suggested  
Changes for Reducing Attrition

Suggested Changes	Sergeants		Petty Officers	
	Reduce Significantly %	Reduce Slightly %	Reduce Significantly %	Reduce Slightly %
More training to better prepare ment for assignment in the fleet	43	31	35	45
More men are given school training to increase their job skills	63	26	33	40
Men more carefully screened for good attitudes before they come into the fleet	60	17	75	10
NCO supervisors are given more authority to decide how problem enlisted men should be handled	46	41	44	26
Enlisted men receive less harassment from their supervisors	17	31	33	36
Make is easier to obtain a change of duty assignment	46	46	43	30
Job assignments are more interesting	63	26	58	35

Multiple response possible

Recruit supervisors are moderately in favor of giving recruits a more thorough orientation program. Drill instructors and company commanders were asked if they think it would help to eliminate problems if, at the beginning of training, recruits were given an extensive orientation including a complete schedule of things to be covered in training. Slightly less than 50% of the supervisors said they think such a program would be preferable to the present system.

Supervisors are not in favor of segregating men according to their educational backgrounds. Even though many supervisors recognize that men with different levels of education have different types of problems, they are very much opposed to a suggestion of putting men with different educational levels in separate quarters. Over 90% of the supervisors feel that men with different educational levels should be mixed together.

One final topic about which supervisors were questioned was career counseling. They were asked how favorable they are toward different suggestions for administering career counseling to enlisted men under their command. Basically, four different suggestions were presented, each of which gave the responsibility to a different level supervisor. The four options for counseling administration were: each supervisor, one designated NCO in each unit, one officer in each unit, and a career counseling office.

NCO's in the fleet believe that career counseling would best be handled by each NCO supervisor. Recruit training supervisors, however, have mixed opinions. The supervisors in the fleet are most in favor of the options involving them and least in favor of the option involving a career counseling office. Among recruit supervisors, drill instructors are opposed to most suggestions for career counseling, but company commanders are receptive to the suggestions that either they themselves do it or a career counseling office handle it. The responses of fleet supervisors are presented in Table 36A, and the responses of recruit supervisors are presented in Table 36B.

Table 36A  
Regular Duty Supervisors' Attitudes Toward  
Alternative Counseling Programs\*

<u>Suggested Programs</u>	<u>Regular Duty Supervisors</u>	
	<u>Sergeants</u> %	<u>Petty Officers</u> %
Each Gunnery Sergeant or CPO should schedule meetings with his men and tell them what he knows about opportunities in the fleet	85	94
One Gunnery Sergeant/CPO in each unit should be trained in career counseling and the men should meet with him	72	97
One officer in each unit should be trained in career counseling and men should meet with him	60	55
The men should be sent to a career counseling office for any counseling they require	57	50

Table 36B  
Recruit Supervisors' Attitudes Toward Alternative  
Counseling Programs\*

<u>Suggested Programs</u>	<u>Recruit Supervisors*</u>	
	<u>Drill Instructors</u> %	<u>Company Commanders</u> %
Each drill instructor/company commander should schedule meetings with his recruits and tell them what he knows about opportunities in the fleet	46	70
One drill instructor/company commander in each battalion/series should be trained in career counseling and the recruits should meet with him	34	40
One officer in each series/battalion should be trained in career counseling and recruits should meet with him	54	45
The recruit should be sent to the career counseling office for any additional counseling he requires	33	95

\* Figures are the percent saying they would strongly or slightly favor the suggested program.

### C. Compatibility of Supervisors' and Enlisted Men's Views

Concerning the relative importance of factors influencing attrition, supervisors and enlisted men are consistent on some factors but inconsistent on others. Their views are most compatible on the importance and effects of the following factors:

- Inadequate preparation
- Fast pace in recruit training
- Job training
- Regimentation
- Duty assignments
- Physical training
- Drugs

Both groups feel that drugs and alcohol are of only secondary importance, while the other factors listed are of major importance. They both also believe that changes in preparation and job assignments would make significant contributions toward reducing attrition.

The areas of least compatibility revolve around the authority of the supervisor. The several facets of this authority -- all of which elicit inconsistent views -- are:

- Harassment
- Use of the chain of command
- Discipline and punishments

Enlisted men, especially attriters, perceive much of the supervisor's behavior as harassment, and it is a major source of stress to them. Supervisors, on the other hand, see their behavior as enforcing regulations. Enlisted men believe there are too many regulations and too many supervisors; as they see it, every aspect of their life can be dominated by one regulation or another.

They feel that supervisors have the discretion of not enforcing many regulations, but they do enforce them merely to harass the enlisted man. There is obviously a communication gap here about what constitutes harassment.

The enlisted men, especially those who have complaints against their superiors, prefer not to use the chain of command. Supervisors, on the other hand, are overwhelmingly in favor of maintaining this procedure. This result, along with others found throughout the study, indicates that supervisors are very reluctant to see enlisted men circumvent them and go to a higher authority.

Supervisors generally feel that the answer to most cases of non-conformity or misconduct is to enforce more discipline or punish the offender. They rarely indicate that more counseling, sympathy, or easing of regulations is needed. Attriters, especially among recruits, feel just the opposite. They think someone should have been more concerned about their problems.

VII. SUMMARY OF FACTORS INFLUENCING ATTRITION  
OF DIFFERENT GROUPS



VII. SUMMARY OF FACTORS INFLUENCING ATTRITION OF DIFFERENT GROUPS

A. Recruit and Regular Duty Differences

The process of attrition is different for recruits and men in the fleet. Typically, recruit attriters are men who did not plan adequately and who knew very little about what to expect in recruit training. The combined effects of a rapid training pace, exhaustive physical training, depersonalization, rigid standards for what seems like purposeless behavior, and unanticipated classroom pressures -- the effects of these produce something akin to a cultural shock for the recruit. What they experience does not seem to be related to their reasons for joining.

Some of these recruit attriters try to adjust, but fail. Many others, however, become actively or passively aggressive; they either quarrel with their supervisors or do not try to conform. Their aggressiveness seems to result from bewildering frustration. Their responses indicate they feel their manliness and self-esteem are challenged, but they see it as an unfair challenge because they do not have the right to be assertive and defend themselves. They would rather be discharged than continue in this situation, but their preference is to "be treated properly" and to learn a skill.

Most attriters in the fleet prefer to be discharged. Unlike the recruit attriters, these regular duty men feel that they know how the Marine Corps/Navy operates. They are dissatisfied with their situation and are pessimistic about their chances to improve it. They express dissatisfaction with one or more of the following: their job assignment, their training, the way they are treated by supervisors, and the regimentation.

The attrition of men in the fleet usually results from deliberate misconduct, especially going AWOL. The misconduct is frequently related to non-military factors such as family problems. Rather than suffer the punishment for their misconduct these men frequently

prefer to remain AWOL or leave the service altogether. Their decision is based in large part on the fact that they do not see any benefit to remaining in the service.

Regular duty attriters frequently feel justified in attriting because they believe they either have not received what was promised to them, or they have been treated unjustly by a superior.

Among attriters in the fleet, men in the service less than 18 months differ from men in 18 months or longer on some reasons for dissatisfaction. The less experienced men express greater dissatisfaction with their rank and also with their job assignments, both ship and shore. The more experienced men are more often dissatisfied with their supervisors' attitudes, are more often married, and are less likely to believe they could receive satisfaction by complaining about a superior.

#### B. Marine Corps and Navy Differences

There are more similarities than differences between Marine and Navy attriters in their reasons for attriting. The differences that exist are more a matter of degree than of kind.

In recruit training, ability to handle classroom instructions is more important in the Navy. Also more important in the Navy is having signed up for a training (Class A) school. Recruits who do not sign up for a school and have difficulty reading are much more likely to become attriters in the Navy than similar recruits in the Marines.

Another factor that is more highly correlated with attrition among Navy recruits than among Marine recruits is the men's perception of the complaint process. Navy recruit attriters are more likely to say they would be harassed if they complained about a supervisor. They are also more likely to say there is no one to whom they could take their complaints.

Apparently, if a recruit has bad rapport with his training leader, this is likely to lead to greater alienation in the Navy than in the Marine Corps.

In the fleet, there are several factors that affect marines and sailors differently. Not having attended a training school has more effect on marines. However, not receiving the particular job one expected, or working at an exhausting job aboard ship, has more effect on sailors. Marines in the fleet more often complain about their rank and pay. Being married leads to a much greater attrition risk in the Navy. And, finally, sailors are more likely than marines to say problems with supervisors are the cause of their attrition.

### C. Differences Between Blacks and Whites

Within each branch of the service, black and white attriters have different background characteristics. Each racial group possesses some characteristics that are correlated with attrition. Blacks more often come from a lower socioeconomic background, have one-parent families, were not in the delayed enlistment program and say they were less fully informed by recruiters about what to expect. Whites, on the other hand, have more pre-service arrests, give less forethought to enlisting, were less fully committed to completing their enlistment at the time they enlisted, and are slightly less likely to have completed high school.

There are three principal organizational features that cause blacks more dissatisfaction than whites. The first is school attendance. Blacks are less likely to sign up for a training school and less likely to attend one.

The second feature probably results from this first feature. Blacks more often complain about the nature of their job assignment. This is especially true in reference to shipboard assignments. Blacks are twice as likely as whites (14% vs. 7%) to say their shipboard assignment is the most dissatisfying feature of military life.

The third organizational characteristic that affects whites and blacks differently is the relationship with supervisors. This is more a matter of degree than kind. Blacks express more dissatisfaction with their supervisors and more frequently respond that their supervisor did something that they believe should have been reported. Blacks are less likely than whites to say they had been given a break by a superior. They also more often report being falsely accused of something.

Black recruit attriters in the Navy are somewhat of an exception to what has been said above. They are less likely than whites to complain of harassment.

Although black attriters generally have more complaints than whites, they are more likely than white attriters to say they want to remain in the service. Consistent with this, they also say they are more embarrassed than whites about receiving a discharge that is not Honorable.

White attriters in the fleet complain more about the social life available to them.

The impression one receives from reading the questionnaire responses is that blacks have more difficulty than whites in communicating their needs and problems. Blacks are as anxious to go to school but they do not apply as often. They do not obtain complete information from the recruiter, and they obviously have misunderstandings with their supervisors. They seem to have a greater tendency to go AWOL without first trying to settle their problems by discussing them with someone.

These differences between white and black attriters are presented in Table 37.

Table 37

Differences Between Black and White Attriters

	<u>Recruits</u>		<u>Regular Duty</u>	
	<u>Black</u>	<u>White</u>	<u>Black</u>	<u>White</u>
	% (42)	% (168)	% (89)	% (236)
N =				
Fathers are unskilled laborers or not in labor force	49	42	45	43
Both parents not at home	71	46	60	42
High school graduate	60	61	56	41
Pre-service arrests	21	23	19	32
In delayed enlistment program	15	49	26	30
Gave a month or more forethought to enlisting	55	46	62	45
Expected to complete enlistment	79	59	-	-
Attended training school	X	X	34	62
Most dissatisfied with job assignment	X	X	9	5
Dissatisfied with supervisor	50	44	58	57
Supervisor did something reportable	43	37	80	61
Given a break by supervisor	33	37	36	58
Falsely accused	57	34	52	43
Prefer to remain in service	33	14	24	14
Embarrassed about discharge	59	54	34	29

#### D. Educational Group Differences

Level of educational attainment is highly correlated with attrition for every group except Marine recruits. Education is important not only because it provides the enlistee with basic skills necessary to meet standards, but also because it is related to other conditions affecting attrition. Attriters who are not high school graduates are less likely to be in the Delayed Enlistment Plan. They also enlist for, and attend training schools less often.

What was said earlier about differences between blacks and whites in communicating needs and problems also applies to attriters with different levels of education. That is, the less educated attriters -- those who are not high school graduates -- are less likely to communicate their needs before going AWOL. Compared to high school graduates, non-graduates less often:

- Make personal requests
- Ask for counseling
- Complain about a supervisor
- Apply for a change of duty
- Believe they can obtain satisfaction if they file a complaint.

Graduates and non-graduates do not appear to be affected differently by any major organizational factors. There is a tendency for graduates in each branch to be more dissatisfied with the social life and non-graduates to be more dissatisfied with dress regulations, but these differences do not appear to be symptomatic of any important problems faced by the two groups.

Even though high school dropouts have high rates of attrition, there are still many dropouts that meet service standards and complete their enlistment obligations. Why do some make it and others fail to make it? In an attempt to answer this question a comparative analysis was made of the responses of adjusted non-graduates and attriting non-graduates. The results indicate that a combination of background characteristics and organizational experiences account for the differences.

From the analysis, one receives the impression that there are two general types of high school dropouts who enter the service. One type consists of men who lack ambition and have not set goals for themselves. The other type consists of men who are ambitious, have goals, and make plans to attain these goals. They see the Marine Corps/ Navy as an opportunity -- in many cases, probably a better opportunity than was offered at school. This latter type, of course, becomes the adjusted recruit. Support for this suggested typology comes from several responses: the adjusted non-graduates are more likely to have been employed prior to enlisting (48% vs. 31%); they more often plan to obtain additional formal education (96% vs. 79%); they enlist for a training school more often (57% vs. 23%); and, if in the fleet, they are more likely to have attended a training school (78% vs. 50% -- Marines only).

VIII. RECOMMENDATIONS FOR FURTHER RESEARCH



## VIII. RECOMMENDATIONS FOR FURTHER RESEARCH

The study clearly indicates a connection between a number of organizational factors and attrition. During the study, however, certain other factors which appear to be tied to attrition came to light. These issues could not be examined further since they are outside the scope of the study. Since their relationship to the attrition problem is evident, it seems that further research into these factors would be productive in the construction of a data base from which the Navy can develop management options to gain control of the early attrition problem. These areas recommended for further study are outlined below.

### A. Recruit Information and Orientation

The study indicates that many first-term enlisted personnel consider the information they received from the recruiter about prospects for personal success in the Navy/Marine Corps environment to be incomplete and/or misleading. They also say that they were inadequately prepared for the rigorous training and discipline they encountered during recruit training. In some cases, the serviceman believes that a breach of promise was made. He therefore feels this is sufficient moral justification for not completing his obligated service.

- The current recruit information and orientation programs should be closely examined to determine exactly what information and/or impression are being conveyed.

### B. Counseling

Approximately 60 to 70 percent of the attriters interviewed did not receive counseling when the difficulties which led to their attrition first arose. Of this group, nearly half feel counseling would have been helpful.

- Research should be conducted into the availability, administration, and use of counseling programs. Specifically, the differences in the type and amount of programs between the units with low attrition rates and those with high rates should be compared.

- The research should include an analysis of the attitudes of men subsequent to receiving counseling to determine the effectiveness of counseling relative to reducing early attrition.

#### C. Attrition Data Bank

The Navy and Marine Corps do not maintain specific and readily available data banks of information on attriters relative to both the perceptions of the individual and his supervisors as to the root cause of his early attrition. This information would be helpful in developing management options to gain control of the early attrition problem.

- A standardized questionnaire should be developed and administered to attriters who are about to be separated from the service as part of the exit procedure. The questionnaire should inquire into the causes of the attrition and what both the attriter and his supervisor feel might have been done to preclude his attrition.
- The data from the questionnaire should then be compiled and summarized to indicate command areas of difficulty, etc.

#### D. Supervisory Personnel/First Term Enlistee Personality Conflicts

The study clearly indicates that conflicts with NCO supervisory personnel contribute to first-term early attrition. What are commonly identified as personality conflicts frequently involve disagreements over values, goals, and especially, norms.

- Research should be conducted to determine the sources of the conflicts, their cognitive elements, and the perceptions of both groups as to appropriate methods of resolution.

E. Supervisory Personnel/First Term Enlistee Communications

The study indicates that in many instances the inability of the serviceman to effectively communicate his needs or problems to his supervisor/instructor is a catalyst to the attrition process.

- The issue of the communication gap between servicemen and their supervisors should be studied further to determine exactly what types of communication problems exist. Are the men afraid to express their problems/questions? Are they overly aggressive in their relationships with authority figures? Are the supervisors themselves open to listening to problems and questions?
- Once the specific problem areas have been ascertained, an approach to tailoring a communication workshop specifically to the needs of the people involved should be researched.

F. Financial Problems

Attriters, both married and unmarried, frequently feel that resolving family financial problems takes priority over their obligation to complete enlistment.

- Research should be conducted to determine how adjusted men with similar problems handle their finances.
- In addition, counseling programs should be evaluated in terms of their ability to help both the serviceman and his spouse when financial problems arise.

**APPENDIX A**  
**Multiple Regression Results**

#### A. Multiple Regression Analysis

Most variables examined in this study show a relationship to attrition. Some are obviously more important than others, but from the way they were presented it is difficult to determine the relative importance of each. In addition, it is difficult to try to conceptually interrelate the variables. Some variables are related to attrition primarily because they are related to other variables that cause attrition, but some variables influencing attrition may not be related to any other influencing variable.

To determine the relative importance of each variable as well as the cumulative effect of several variables, stepwise multiple regression analyses were conducted for each segment in each service. Hence, there were four principal regressions run:

- Marine Recruits
- Navy Recruits
- Marine Regular Duty
- Navy Regular Duty

In addition, there were two runs comparing blacks and whites, one for Marine Regular Duty attriters and one for Navy Regular Duty attriters.

Basically the computer program used for this type of analysis produces:

- A correlation of each variable with the dependent variable, attrition. This is referred to as the zero order correlation. It appears in the pages that follow as "Step No. 0" product. While the computer printout labels the column heading as Partial Correlation, at the Step No. 0, this is, in fact, a zero order correlation. In subsequent steps it is the partial correlation with the effects of the variables previously entered into the equation removed.
- A correlation matrix of all the variables entered into the regression. The dependent variable, attrition, is also included in this matrix.
- A summary of the cumulative effects of several variables. The program also produces partial cumulative effects each time a new variable is brought into the equation (i.e. at each step), but only the summary is presented here. The summary represents all those variables which could be entered into the equation while the equation maintains a cumulative effect that is statistically significant at the .01 level of probability.

Photocopies of the computer program printouts\* for these three phases of the analysis are presented for each of the six regression runs. A variable code sheet listing the variable definitions and values is also provided. Variables which were not measured on an ordinal or interval scale were treated in the equations as "0", "1" values. It should be noted that if the resulting regression equations were applied to a new set of data, a reduction in the multiple correlations would be expected to occur.

While alternative multivariate approaches involving the use of transformations on some of the variables were considered, it was felt that given the nature of the sample and the relatively small sample sizes employed for any given regression analysis, such procedures would impute a greater degree of precision to the results than could be justified. This is especially true since the regression analysis was conducted more for diagnostic or explanatory purposes than to develop a precise prediction equation for the attrition process.

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\* The program used for the analysis is "BMDP2R - Step-wise Regression" from the Biomedical Computer Programs produced by the University of California.

Variable Code List

<u>Variable Label</u>	<u>Definitions and Values</u>	<u>Sample Groups*</u>			
		<u>Recruits</u>		<u>Regular Duty</u>	
		<u>Marines</u>	<u>Navy</u>	<u>Marines</u>	<u>Navy</u>
Educ	Education Completed 1 = 8th grade or less 2 = 9th to 11th grade 3 = 12th grade 4 = Some college 5 = College graduate	X	X	X	X
Race	Race 1 = Not Black 2 = Black	X	X	X	X
Fore	Forethought to enlisting 02 = Two weeks or less 04 = Three weeks to a month 15 = Between 1 and 6 months 39 = Six months to a year 52 = Over a year	X	X	X	X
Delay	In delayed enlistment program 1 = Yes 2 = No	X	X	X	X
Married (M.S.)	Marital status 1 = Married 2 = Engaged 3 = Going with a girl 4 = Not involved	X	X	X	X
Arrest	Pre-service arrest 1 = yes 0 = no	X	X	X	X
Read	Reading ability 1 = Read well 2 = Read with difficulty 3 = Can not read	X	X	X	X
Occ	Father's Occupation				
Occ 1	1 = Professional	X	X	X	X
Occ 2	2 = Managers and proprietors	X	X	X	X
Occ 3	3 = Clerical, sales	X	X	X	X
Occ 4	4 = Craftsman, operatives	X	X	X	X
Occ 5	5 = Service workers, laborers		X	X	X
Occ 6	6 = Not in labor force, no answer		X	X	X

\* X indicates the variable was included in the regression.

Variable Code List (cont'd)

<u>Variable Label</u>	<u>Definitions and Values</u>	<u>Sample Groups*</u>			
		<u>Recruits</u>		<u>Regular Duty</u>	
		<u>Marines</u>	<u>Navy</u>	<u>Marines</u>	<u>Navy</u>
School	Signed-up for training school 1 = yes 0 = no	X	X		
Attend	Attended training school 1 = yes 0 = no			X	
Satis	Satisfaction at completion of recruit training 1 = Very satisfied 2 = Somewhat satisfied 3 = Somewhat dissatisfied 4 = Very dissatisfied			X	X
Comp	Result of complaining about supervisor 1 = 2 = } see Table 23 in text 3 = }	X	X	X	X
Age	Age at enlistment 17 = 17 18 = 18 etc.	X	X	X	X
Buddy	Enlist on Buddy Plan 1 = yes 0 = no	X	X	X	X
Parents	Parents alive and together 1 = yes 0 = no	X	X	X	X
Car	Have a car on base 1 = yes 0 = no			X	X
Cruise	Number of cruises had 0 = 0 1 = 1 etc. 9 = 9 or more			X	X
Dep	Dependent variable 1 = adjusted 0 = attriter				

\* X indicates the variable was included in the regression.



# REGRESSION 1: MARINE RECRUITS

REGRESSION TITLE: . . . . . MARINE RECRUITS ADJ VS ATTRIBUTES

STEPPING ALGORITHM: . . . . . F

MINIMUM NUMBER OF STEPS: . . . . . 38

DEPENDENT VARIABLE: . . . . . 18 DEP

MINIMUM ACCEPTABLE F TO ENTER: . . . . . 4.000

MAXIMUM ACCEPTABLE F TO REMOVE: . . . . . 3.900

MINIMUM ACCEPTABLE TOLERANCE: . . . . . 0.01000

STEP NO. 0

MULTIPLE R 0.0

MULTIPLE R-SQUARE 0.0

STD. ERROR OF EST. 0.570

## ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	0.0	0	0.0	0.0
RESIDUAL	33.332565	149	0.2237005	

## VARIABLES IN EQUATION

VARIABLE	COEFFICIENT OF COEFF	STD. ERROR	STD REG COEFF	F TO REMOVE LEVEL	VARIABLE	PARTIAL CORR.	TOLERANCE	F TO ENTER LEVEL
(Y-INTERCEPT	0.333 1							

## VARIABLES NOT IN EQUATION

	EDV							
RACE	1	0.04099	1.00000	0.249	1			
FORE	2	0.03411	1.00000	0.172	1			
RELAY	3	0.20306	1.00000	6.365	1			
MS	4	-0.28471	1.00000	13.476	1			
ARREST	5	-0.01590	1.00000	0.037	1			
BEAD	6	0.00850	1.00000	1.168	1			
SCHOOL	7	-0.12375	1.00000	3.583	1			
COMP	8	-0.10078	1.00000	5.030	1			
AGE	9	-0.34046	1.00000	19.404	1			
BURDY	10	-0.11876	1.00000	2.117	1			
UCC1	11	-0.13464	1.00000	2.733	1			
UCC2	12	-0.00300	1.00000	0.000	1			
UCC3	13	-0.10790	1.00000	4.297	1			
UCC4	14	-0.00000	1.00000	0.000	1			
UCC5	15	-0.00360	1.00000	0.014	1			
UCC6	16	-0.16174	1.00000	3.034	1			
PARENT	17	-0.00200	1.00000	0.000	1			
	18	-0.16175	1.00000	3.976	1			

Appendix A(5)

STEP NO. 1

VARIABLE ENTERED 9 COMP

MULTIPLE R 0.3405

MULTIPLE R-SQUARE 0.1159

STD. ERROR OF EST. 0.4462

## ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	3.063591	1	3.063591	19.404
RESIDUAL	29.468979	148	0.1991267	

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## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	0 Y-INTERCEPT	1 EDU	2 RACE	3 FORD	4 DELAY	5 RS	6 ARREST	7 READ	8 SCHNUL	9 COMP
STEP										
0	0.3333*	0.0280	0.0308	0.0046	-0.2778	-0.0084	0.1119	-0.2148	-0.1720	-0.2070
1	0.7624*	0.0009	0.0763	0.0037	-0.2159	0.0069	0.0712	-0.1823	-0.1462	-0.2070*
2	1.0022*	-0.0287	0.1238	0.0024	-0.2159*	0.0025	0.0257	-0.1373	-1.1174	-0.1760*
3	0.9906*	-0.0344	0.1462	0.0022	-0.2286*	0.0032	0.0272	-0.1037	-0.0921	-0.1777*

NOTE--

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	10 AGE	11 BUDDY	12 OCC1	13 OCC2	14 OCC3	15 OCC4	16 OCC5	17 OCC6	19 PARENT
STEP									
0	-0.0344	-0.1394	-0.0000	0.2565	-0.0000	-0.0092	-0.2009	-0.0000	-0.1539
1	-0.0358	-0.0993	-0.0165	0.2686	-0.0323	-0.0119	-0.1220	-0.0375	-0.1099
2	-0.0256	-0.0807	-0.0497	0.2924	-0.0276	-0.0260	-0.0898	-0.0399	-0.0991
3	-0.0206	-0.0668	-0.0179	0.2924*	0.0071	0.0282	-0.0506	-0.0023	-0.0828

NOTE--

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

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# REGRESSION 1: MARINE RECRUITS

## CORRELATION MATRIX

	EDU	RACE	FURE	DELAY	MS	ARREST	READ	SCHOOL	CUMP	AGE
	1	2	3	4	5	6	7	8	9	10
EDU	1									
RACE	2	1.0000								
FURE	3	0.0481	1.0000							
DELAY	4	-0.0111	-0.3192	1.0000						
MS	5	0.1815	0.0354	-0.0183	1.0000					
ARREST	6	0.0259	0.0423	-0.0426	0.0100	1.0000				
READ	7	-0.2769	-0.0448	0.1913	-0.0963	0.0972	1.0000			
SCHOOL	8	-0.1873	0.1397	0.0360	0.1648	-0.0301	0.2149	1.0000		
CUMP	9	-0.1167	0.1397	-0.0148	0.2211	-0.0961	0.0702	0.0027	1.0000	
AGE	10	0.3210	-0.1385	0.1654	-0.1827	-0.1720	0.0327	-0.0291	-0.0147	1.0000
BURDY	11	0.0093	0.1654	0.1011	-0.1806	-0.0524	-0.0474	0.0067	0.1176	0.1720
UCC1	12	0.0314	-0.1224	-0.0903	-0.0066	0.0000	-0.0991	-0.1389	-0.0279	-0.0911
UCC2	13	0.0263	0.0057	0.0705	-0.0072	-0.0193	-0.1161	-0.1337	0.0230	-0.0802
UCC3	14	0.0193	-0.0091	0.0000	0.0674	0.0298	0.1515	0.0673	-0.0602	0.0300
UCC4	15	-0.0661	0.0190	-0.0665	-0.0034	0.0061	0.0035	0.0466	-0.0083	-0.0288
UCC5	16	-0.0418	-0.0571	0.0403	-0.1211	0.0090	0.1097	0.0499	0.1108	-0.0109
UCC6	17	0.0624	0.2539	0.1634	-0.0283	-0.0233	-0.0545	0.0245	-0.0891	0.1508
DEP	18	0.0410	0.0341	0.2031	-0.2887	0.0885	-0.1537	-0.1808	-0.3405	-0.1188
PARENT	19	-0.1834	0.2501	-0.0293	0.0024	-0.1143	0.1050	0.0508	0.1429	0.1117

	BURDY	UCC1	UCC2	UCC3	UCC4	UCC5	UCC6	DEP	PARENT
	11	12	13	14	15	16	17	18	19
BURDY	11								
UCC1	12	1.0000							
UCC2	13	-0.0231	1.0000						
UCC3	14	-0.0293	-0.1152	1.0000					
UCC4	15	0.1161	-0.2441	-0.2760	1.0000				
UCC5	16	0.0252	-0.1123	-0.1316	-0.3153	1.0000			
UCC6	17	-0.1174	-0.1382	-0.1819	-0.3879	-0.1784	1.0000		
DEP	18	-0.1366	-0.0000	0.1680	-0.0096	-0.1417	-0.0000	1.0000	
PARENT	19	0.1497	-0.0595	-0.0843	0.0977	-0.0903	0.1856	-0.1618	1.0000

Appendix A(7)

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REGRESSION 1: MARINE RECRUITS

SUMMARY STEP	TABLE ENTERED NO.	VARIABLE ENTERED NO.	REMOVED	R	MULTIPLE R <sup>2</sup>	INCREASE IN R <sup>2</sup>	F-TO- ENTER	F-TO- REMOVE	NUMBER OF INDEPENDENT VARIABLES INCLUDED	LEVEL OF SIGNIFICANCE P = .01
1	9	CUMP		0.3485	0.1159	0.1159	19.4838		1	
2	4	DELAY		0.4047	0.1638	0.0479	9.4191		2	
3	13	UCC2		0.4475	0.2003	0.0365	6.6583		3	

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# REGRESSION 2: NAVY RECRUITS

REGRESSION TITLE. . . . . NAVY RECRUITS ADJ VS ATTRITERS  
 STEPPING ALGORITHM. . . . . F  
 MAXIMUM NUMBER OF STEPS. . . . . 38  
 DEPENDENT VARIABLE. . . . . IN DEP  
 MINIMUM ACCEPTABLE F TO ENTER. . . . . 4.000  
 MAXIMUM ACCEPTABLE F TO REMOVE. . . . . 3.900  
 MINIMUM ACCEPTABLE TOLERANCE. . . . . 0.01000

STEP NO. 0

MULTIPLE R 0.0  
 MULTIPLE R-SQUARE 0.0  
 STD. ERROR OF EST. 0.4727

## ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	0.0	0	0.0	0.0
RESIDUAL	39.999054	179	0.2234582	

## VARIABLES IN EQUATION

VARIABLE	COEFFICIENT OF COEFF	STD. ERROR	STD REG	COEFF	F TO REMOVE LEVEL	PARTIAL CORR.	TOLERANCE	F TO ENTER LEVEL
(Y-INTERCEPT	0.333 1							

## VARIABLES NOT IN EQUATION

VARIABLE	COEFF	STD REG	COEFF	F TO REMOVE LEVEL	PARTIAL CORR.	TOLERANCE	F TO ENTER LEVEL
EDU	1	0.39550	1.00000	33.006			
RACE	2	-0.05343	1.00000	0.511			
FORE	3	0.25371	1.00000	12.246			
DELAY	4	-0.47169	1.00000	50.937			
MS	5	0.09552	1.00000	1.639			
ARREST	6	0.16360	1.00000	4.895			
READ	7	-0.38102	1.00000	13.240			
SCHOOL	8	-0.52118	1.00000	66.382			
COMP	9	-0.57326	1.00000	87.129			
AGE	10	-0.17911	1.00000	5.9 0			
MURDER	11	-0.12908	1.00000	3.016			
OCC1	12	0.05367	1.00000	0.615			
OCC2	13	0.02272	1.00000	0.092			
OCC3	14	-0.01279	1.00000	0.029			
OCC4	15	-0.03930	1.00000	0.275			
OCC5	16	-0.00000	1.00000	0.000			
OCC6	17	-0.00000	1.00000	0.000			
PARENT	19	-0.33470	1.00000	22.456			

STEP NO. 1

VARIABLE ENTERED 0 COMP

MULTIPLE R 0.5133  
 MULTIPLE R-SQUARE 0.3286  
 STD. ERROR OF EST. 0.3886

## ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	13.144792	1	13.14479	87.129
RESIDUAL	26.854253	178	0.1508666	

# REGRESSION 2: NAVY RECRUITS

## CORRELATION MATRIX

	EDU	1	RACE	2	FORE	3	DELAY	4	MS	5	ARREST	6	READ	7	SCHOOL	8	COMP	9	AGE	10
EDU	1	1.0000																		
MALE	2	-0.0493	1.0000																	
FORE	3	0.2089	0.0011	1.0000																
DELAY	4	-0.2411	0.2122	-0.1702	1.0000															
MS	5	0.1436	-0.1128	0.0123	-0.0919	1.0000														
ARREST	6	0.1696	0.0045	0.1276	-0.0917	0.0002	1.0000													
READ	7	-0.2998	-0.0190	-0.0417	0.1817	-0.1023	-0.1369	1.0000												
SCHOOL	8	-0.3224	0.0319	-0.2273	0.3542	-0.0525	-0.0331	0.2467	1.0000											
COMP	9	-0.3107	0.0193	-0.1741	0.2923	-0.0946	-0.1608	0.2381	0.0910	1.0000										
AGE	10	0.1981	0.0673	-0.0367	0.2179	-0.2654	-0.0428	0.0910	0.0910	0.0991	1.0000									
BUDDY	11	0.0583	-0.0581	0.0455	0.1147	-0.0639	-0.0478	0.0631	-0.1199	0.1199	0.0244	1.0000								
UCC1	12	0.1418	-0.1273	-0.0588	-0.0927	0.0773	0.0994	-0.0075	-0.1124	-0.1057	-0.1057	0.0244	1.0000							
UCC2	13	0.2268	-0.0449	0.0212	-0.0295	-0.0783	0.0897	-0.1587	-0.1534	0.0279	-0.1057	0.0244	0.0244	1.0000						
UCC3	14	-0.0131	-0.0030	0.0265	-0.0295	0.0764	0.0005	-0.0552	0.0200	0.0200	-0.0188	-0.0188	-0.0188	0.0200	1.0000					
UCC4	15	-0.1403	0.0658	0.0951	0.1438	-0.0231	-0.0430	0.0878	0.0760	0.0760	0.0489	0.0489	0.0489	0.0760	0.0760	1.0000				
UCC5	16	-0.0787	0.0524	-0.0127	-0.1223	-0.0372	0.0817	0.0532	0.0532	0.0532	-0.0396	-0.0396	-0.0396	0.1526	0.1526	0.0244	1.0000			
UCC6	17	-0.0747	0.0040	-0.1670	0.0357	0.0173	-0.2438	0.0560	-0.3810	-0.3810	-0.5212	-0.5212	-0.5212	-0.0269	-0.0269	-0.0464	-0.0464	1.0000		
DEP	18	0.3955	-0.0535	0.2537	-0.4717	0.0955	0.1636	0.1636	-0.1427	-0.1427	0.1721	0.1721	0.1721	0.1303	0.1303	0.1303	0.1303	0.1303	1.0000	
PARENT	19	-0.2674	0.1814	-0.1557	0.2988	-0.1658	-0.0817	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	-0.1658	1.0000

	BUDDY	11	UCC1	12	UCC2	13	UCC3	14	UCC4	15	UCC5	16	UCC6	17	DEP	18	PARENT	19
BUDDY	11	1.0000																
UCC1	12	-0.1716	1.0000															
UCC2	13	0.1567	-0.1166	1.0000														
UCC3	14	-0.0317	-0.0998	-0.1380	1.0000													
UCC4	15	-0.1435	-0.2969	-0.4106	-0.3513	1.0000												
UCC5	16	0.0702	-0.0968	-0.1339	-0.1145	-0.3408	1.0000											
UCC6	17	0.1313	-0.0776	-0.1073	-0.0918	-0.2733	-0.0891	1.0000										
DEP	18	-0.1291	0.0587	0.0227	-0.0128	-0.0393	-0.0030	-0.0030	1.0000									
PARENT	19	0.0756	-0.1613	0.0516	-0.1803	0.0376	0.0563	0.1807	-0.3347	1.0000								

Appendix A(10)

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## REGRESSION 2: NAVY RECRUITS

SUMMARY STEP	TABLE	VARIABLE	ENTERED	REMOVED	R	MULTIPLE R <sup>2</sup>	INCREASE IN R <sup>2</sup>	F-TO- ENTER	F-TO- REMOVE	NUMBER OF INDEPENDENT VARIABLES INCLUDED	LEVEL OF SIGNIFICANCE
1	9	CUMP			0.5733	0.3286	0.3286	87.1285		1	
2	8	SCHOOL			0.6707	0.4498	0.1212	39.9814		2	
3	4	DELAY			0.7086	0.5021	0.0523	18.4720		3	
4	7	READ			0.7299	0.5328	0.0308	11.5194		4	
5	19	PARENT			0.7433	0.5526	0.0197	7.6753		5	P = .01

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# STEPWISE REGRESSION COEFFICIENTS

15

VARIABLES	0	Y-INTCPT	1	EDU	2	RACE	3	FURE	4	DELAY	5	MS	6	ARREST	7	READ	8	SCHOOL	9	COMP
STEP	0	0.3333*	0.2933	-0.0686	0.0057	-0.4450	0.0476	0.1890	-0.3226	-0.4938	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130
1	0.9905*	0.1784	-0.0544	0.0036	-0.3137	0.0208	0.0208	0.0847	-0.2195	-0.3504	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130
2	1.3905*	0.1195	-0.0424	0.0022	-0.2352	0.0170	0.0170	0.0954	-0.1559	-0.3504	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130
3	1.5859*	0.1015	0.0224	0.0018	-0.2352*	0.0097	0.0097	0.0803	-0.1559	-0.3504	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130	-0.3130
4	1.6899*	0.0757	0.0117	0.0020	-0.2219*	0.0030	0.0030	0.0593	-0.1559*	-0.3504*	-0.3130*	-0.3130*	-0.3130*	-0.3130*	-0.3130*	-0.3130*	-0.3130*	-0.3130*	-0.3130*	-0.3130*
5	1.8079*	0.0567	0.0379	0.0016	-0.1852*	-0.0024	-0.0024	0.0433	-0.1421*	-0.2556*	-0.1958*	-0.1958*	-0.1958*	-0.1958*	-0.1958*	-0.1958*	-0.1958*	-0.1958*	-0.1958*	-0.1958*

## NOTE--

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK
- 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

# STEPWISE REGRESSION COEFFICIENTS

VARIABLES	10	AGE	11	BUDDY	12	DECI	13	DECC	14	DECC	15	DECC	16	DECC	17	DECC	18	DECC	19	PARENT
STEP	0	-0.0409	-0.1538	0.1033	0.0310	-0.0196	-0.0371	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
1	-0.0330	-0.1372	-0.0934	0.0528	-0.0362	-0.0106	-0.0106	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148	-0.0148
2	-0.0266	-0.0892	-0.0544	-0.0302	-0.0213	0.0102	0.0102	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635	0.0635
3	-0.0170	-0.0669	-0.0723	-0.0270	-0.0334	0.0373	0.0373	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008	-0.0008
4	-0.0149	-0.0602	-0.0607	-0.0634	-0.0687	0.0475	0.0475	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127
5	-0.0159	-0.0536	-0.0973	-0.0483	-0.0492	0.0458	0.0458	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350

## NOTE--

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK
- 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

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REGRESSION 3: CRIME REGULAR DUTY  
MARINE REGULAR ADJ(1) VS ATTR(0)

REGRESSION TITLE. . . . .  
STEPPING ALGORITHM. . . . .  
MAXIMUM NUMBER OF STEPS. . . . . 30  
DEPENDENT VARIABLE. . . . . 21 DEP  
MINIMUM ACCEPTABLE F TO ENTER. . . . . 1.100, 1.100  
MAXIMUM ACCEPTABLE F TO REMOVE. . . . . 1.000, 1.000  
MINIMUM ACCEPTABLE TOLERANCE. . . . . 0.01000

STEP NO. 0

MULTIPLE R 0.0  
MULTIPLE R-SQUARE 0.0  
STD. ERROR OF EST. 0.5718

## ANALYSIS OF VARIANCE

SUM OF SQUARES DF MEAN SQUARE F RATIO  
REGRESSION 0.0 0 0.0 0.0  
RESIDUAL 66.775528 300 0.2225851

## VARIABLES IN EQUATION

VARIABLE	COEFFICIENT OF COEFF	STD. ERROR	STD. REG COEFF	F TO REMOVE LEVEL	VARIABLE	PARTIAL CORR.	TOLERANCE	F TO ENTER LEVEL
(Y-INTERCEPT	0.332	1						

## VARIABLES NOT IN EQUATION

EDU	1	0.30730	1.00000					31.180
RACE	2	-0.13390	1.00000					5.458
FORE	3	0.18040	1.00000					10.058
DELAY	4	-0.23944	1.00000					18.185
MARRIED	5	0.03045	1.00000					0.278
ARREST	6	0.08995	1.00000					2.439
READ	7	-0.13235	1.00000					5.331
DCC1	8	0.01006	1.00000					0.030
DCC2	9	0.06391	1.00000					1.226
DCC3	10	-0.06429	1.00000					1.241
DCC4	11	-0.08763	1.00000					2.314
DCC5	12	0.09735	1.00000					2.661
DCC6	13	-0.00576	1.00000					0.010
SATIS	14	-0.17661	1.00000					9.626
COMP	15	-0.29842	1.00000					29.231
AGE	16	0.05627	1.00000					0.950
BUDDY	17	0.03460	1.00000					0.358
CAR	18	-0.44500	1.00000					73.831
CRUISE	19	0.01737	1.00000					0.090
ATTEND	20	-0.28758	1.00000					26.957
PARENT	22	-0.13888	1.00000					5.880

STEP NO. 1  
VARIABLE ENTERED 1 EDU

MULTIPLE R 0.3073  
MULTIPLE R-SQUARE 0.0944  
STD. ERROR OF EST. 0.4497

## ANALYSIS OF VARIANCE

SUM OF SQUARES DF MEAN SQUARE F RATIO  
REGRESSION 6.3058548 1 6.305855 31.180  
RESIDUAL 60.469681 299 0.2022397

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# REGRESSION 3: MARINE REGULAR DUTY

## CORRELATION MATRIX

	EDU	1	RACE	2	FORE	3	DELAY	4	MARRIED	5	ARREST	6	READ	7	DCC1	8	DCC2	9	DCC3	10
EDU	1	1.0000																		
RACE	2	0.0691	1.0000																	
FORE	3	0.1485	0.0162	1.0000																
DELAY	4	-0.1438	0.0318	-0.0995	1.0000															
MARRIED	5	0.0572	-0.0502	0.0771	-0.0696	1.0000														
ARREST	6	0.2403	0.0409	0.0771	-0.0895	0.0451	1.0000													
READ	7	-0.2235	0.0835	-0.0871	0.0654	-0.0093	-0.1169	1.0000												
DCC1	8	0.1669	-0.0211	0.1094	-0.0367	0.0383	0.0629	-0.0678	1.0000											
DCC2	9	0.0910	-0.0031	-0.0104	-0.0630	0.0111	0.1509	0.0006	-0.1029	1.0000										
DCC3	10	-0.0463	0.0241	0.1452	-0.0469	0.0361	-0.1441	0.0433	-0.0611	-0.0884	1.0000									
DCC4	11	-0.0308	-0.1013	-0.1038	0.0908	-0.0395	0.0292	-0.0087	-0.2422	-0.3503	-0.0884	1.0000								
DCC5	12	-0.0748	0.0660	0.0012	-0.0416	-0.0529	-0.0426	0.0100	-0.1162	-0.1681	-0.0998	-0.2079	1.0000							
DCC6	13	-0.0456	0.0781	-0.0118	0.0301	0.0511	-0.0969	0.0225	-0.1099	-0.1575	-0.0935	-0.0935	-0.0935	1.0000						
SATIS	14	-0.0337	0.0769	-0.1416	0.0938	-0.0962	-0.0331	0.0469	-0.1328	-0.0179	-0.0196	0.0507	0.0507	0.0507	1.0000					
CUMP	15	-0.1283	0.1138	-0.1316	0.0737	-0.0845	-0.0810	0.0290	0.0042	-0.0963	0.0507	0.0507	0.0507	0.0507	0.0507	1.0000				
AGE	16	0.1285	0.1091	-0.0234	0.0692	-0.0714	-0.1415	-0.0149	-0.0300	-0.0365	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	1.0000			
BUDY	17	0.0588	0.0185	0.0189	0.1351	-0.0116	0.0760	0.0419	0.1128	0.0087	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	-0.0206	1.0000		
CAR	18	-0.2067	0.1433	-0.0627	0.1354	0.0366	-0.1701	0.1014	-0.0228	-0.0622	0.0325	0.0325	0.0325	0.0325	0.0325	0.0325	0.0325	0.0325	1.0000	
CRUISE	19	0.0619	0.0177	0.0311	-0.0162	-0.0213	0.1362	-0.0754	0.0846	0.0428	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	-0.0777	1.0000
SCHOOL	20	-0.1613	0.2199	-0.0307	0.1449	-0.0969	-0.0863	0.1600	-0.0759	-0.0235	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366	0.0366
DEF	21	0.3073	-0.1339	0.1804	-0.2394	0.305	-0.0899	-0.1324	0.0101	0.0639	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643	-0.0643
PARENT	22	-0.1685	0.1618	-0.1593	0.0568	-0.1465	-0.1665	0.1495	-0.0472	0.0387	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511

	DCC4	11	DCC5	12	DCC6	13	SATIS	14	CUMP	15	AGE	16	BUDY	17	CAR	18	CRUISE	19	ATTEND	20
DCC4	11	1.0000																		
DCC5	12	-0.3954	1.0000																	
DCC6	13	-0.3706	-0.1778	1.0000																
SATIS	14	0.0878	-0.0183	0.0181	1.0000															
CUMP	15	0.0674	-0.0628	0.0279	0.1773	1.0000														
AGE	16	-0.0835	0.0330	0.1361	-0.0137	-0.1026	1.0000													
BUDY	17	-0.0622	-0.0392	0.0537	-0.0552	0.0360	0.0208	1.0000												
CAR	18	-0.0046	-0.0702	0.1356	0.0994	0.2241	-0.0635	0.0316	1.0000											
CRUISE	19	-0.1146	0.0789	0.0275	-0.0603	0.0667	-0.0882	0.0575	-0.0860	1.0000										
SCHOOL	20	-0.0392	0.0436	0.0640	0.1120	0.1653	0.0243	0.0346	0.2890	-0.0726	1.0000									
DEF	21	-0.0876	0.0973	-0.0058	-0.1766	-0.2984	0.0563	0.0346	-0.4450	0.0174	-0.0726	1.0000								
PARENT	22	-0.0590	-0.0080	0.0570	0.0479	0.0414	0.0741	-0.0296	0.1750	0.0186	-0.0174	-0.0726	1.0000							

DEP 21 PARENT 22

DEP 21 1.0000  
PARENT 22 -0.1389 1.0000

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REGRESSION 3: MARINE REGULAR DUTY

SUMMARY STEP NO.	TABLE ENTERED	VARIABLE REMOVED	R	MULTIPLE RSQ	INCREASE IN RSQ	F-TC- ENTER	F-TC- REMOVE	NUMBER OF INDEPENDENT VARIABLES INCLUDED
1	1	EDU	0.3073	0.0944	0.0944	31.1801		1
2	15	LCMP	0.4033	0.1626	0.0682	26.2738		2
3	20	ATTEND	0.4523	0.2046	0.0420	15.6645		3
4	4	DLAY	0.4797	0.2302	0.0256	9.8279		4
5	12	OCC5	0.4905	0.2406	0.0105	4.0613		5
6	3	FORE	0.5001	0.2501	0.0095	3.7145		6
7	2	RACE	0.5080	0.2580	0.0079	3.1348		7
8	14	SATIS	0.5140	0.2642	0.0062	2.4494		8
9	8	BLCL	0.5173	0.2676	0.0034	1.3485		9

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## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	0 Y-INTCPT	1 EDU	2 RACE	3 FDR	4 DELAY	5 MARRIED	6 ARREST	7 READ	8 DCC1	9 DCC2
STEP										
0	0.3322*	0.2115	-0.1396	0.0048	-0.2277	0.0120	0.0917	-0.2072	0.0190	0.0896
1	-0.1905*	0.2115*	-0.1625	0.0036	-0.1896	0.0051	0.0174	-0.1049	-0.0802	0.0551
2	0.2817*	0.1882*	-0.1307	0.0029	-0.1760	-0.0030	0.0032	-0.1048	-0.0671	0.0233
3	0.5655*	0.1677*	-0.0874	0.0029	-0.1549	-0.0094	0.0060	-0.0830	-0.0890	0.0240
4	0.8055*	0.1543*	-0.0856	0.0026	-0.1549*	-0.0094	-0.0144	-0.0580	-0.0915	0.0131
5	0.7555*	0.1603*	-0.0944	0.0026	-0.1495*	-0.0073	-0.0112	-0.0561	-0.0721	0.0395
6	0.7089*	0.1516*	-0.0965	0.0026*	-0.1423*	-0.0039	-0.0147	-0.0472	-0.0900	0.0448
7	0.7680*	0.1594*	-0.0965*	0.0027*	-0.1410*	-0.0047	-0.0105	-0.0361	-0.0934	0.0468
8	0.8047*	0.1604*	-0.0927*	0.0024*	-0.1360*	-0.0075	-0.0112	-0.0337	-0.1139	0.0465
9	0.8021*	0.1665*	-0.0936*	0.0025*	-0.1360*	-0.0071	-0.0102	-0.0353	-0.1139*	0.0357

## NOTE-

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	10 DCC3	11 DCC4	12 DCC5	13 DCC6	14 SATS	15 COMP	16 AGE	17 BUDDY	18 CAR	19 CRUISE
STEP										
0	-0.1392	-0.0829	0.1252	-0.0078	-0.0791	-0.1927	0.0176	0.0358	-0.4764	0.0072
1	-0.1086	-0.0740	0.1557	0.0111	-0.0746	-0.1701	0.0053	0.0172	-0.4266	-0.0009
2	-0.0832	-0.0585	0.1317	0.0190	-0.0558	-0.1701*	-0.0019	0.0251	-0.3844	0.0094
3	-0.0729	-0.0694	0.1435	0.0342	-0.0483	-0.1501*	0.0020	0.0338	-0.3494	0.0014
4	-0.0941	-0.0560	0.1326	0.0377	-0.0431	-0.1461*	0.0065	0.0525	-0.3176	0.0011
5	-0.0714	-0.0209	0.1326*	0.0652	-0.0427	-0.1409*	0.0053	0.0554	-0.3300	-0.0040
6	-0.1075	-0.0114	0.1327*	0.0654	-0.0380	-0.1336*	0.0064	0.0531	-0.3291	-0.0057
7	-0.1030	-0.0186	0.1413*	0.0763	-0.0363	-0.1277*	0.0097	0.0535	-0.3221	-0.0050
8	-0.1050	-0.0127	0.1401*	0.0765	-0.0363*	-0.1202*	0.0093	0.0479	-0.3196	-0.0077
9	-0.1166	-0.0345	0.1323*	0.0677	-0.0398*	-0.1181*	0.0086	0.0542	-0.3183	-0.0055

## NOTE-

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	20 ATTEND	22 PARENT
STEP		
0	-0.2779	-0.1309
1	-0.2361	-0.0845
2	-0.2028*	-0.0795
3	-0.1840*	-0.0642
4	-0.1890*	-0.0522
5	-0.1909*	-0.0601
6	-0.1714*	-0.0481
7	-0.1660*	-0.0366
8	-0.1682*	-0.0339

# REGRESSION 4: NAVY REGULAR DUTY

REGRESSION TITLE: . . . . . NAVY REGULAR ADJ(1) VS ATTR(1)

STEPPING ALGORITHM: . . . . . F

MAXIMUM NUMBER OF STEPS: . . . . . 38

DEPENDENT VARIABLE: . . . . . 20 DEP

MINIMUM ACCEPTABLE F TO ENTER: . . . . . 1.100

MINIMUM ACCEPTABLE F TO REMOVE: . . . . . 1.000

MINIMUM ACCEPTABLE TOLERANCE: . . . . . 0.01000

STEP NO. 0

MULTIPLE R 0.0

MULTIPLE R-SQUARE 0.0

STD. ERROR OF EST. 0.5707

## ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	0.0	0	0.0	0.0
RESIDUAL	80.437271	363	0.2215902	

VARIABLES IN EQUATION  
SUM OF SQUARES  
STD. ERROR  
OF EST.

COEFFICIENT OF CORRELATION

0.000

VARIABLES NOT IN EQUATION  
SUM OF SQUARES  
STD. ERROR  
OF EST.

VARIABLE	SUM OF SQUARES	STD. ERROR OF EST.	F TO REMOVE LEVEL	POSITION	SEQUENCE	TO ENTER LEVEL
DELAY	0.04316	1.00000	11.334	1	1	1
PARIENT	0.17424	1.00000	1.065	2	1	1
ARREST	0.05405	1.00000	0.072	3	1	1
READ	0.01425	1.00000	0.033	4	1	1
DECC1	0.00948	1.00000	0.073	5	1	1
DECC2	0.03613	1.00000	1.737	6	1	1
DECC3	0.00910	1.00000	0.000	7	1	1
DECC4	0.00002	1.00000	1.653	8	1	1
DECC5	0.00743	1.00000	0.226	9	1	1
DECC6	0.03008	1.00000	3.263	10	1	1
SATIS	0.09451	1.00000	42.530	11	1	1
COMP	0.32426	1.00000	3.953	12	1	1
AGE	0.18393	1.00000	0.022	13	1	1
BURDY	0.00771	1.00000	15.256	14	1	1
CAR	0.20997	1.00000	0.708	15	1	1
CRUISE	0.04418	1.00000	1.658	16	1	1
PARENT	0.07203	1.00000		17	1	0

STEP NO. 1  
VARIABLE ENTERED 3 FOR

MULTIPLE R 0.3628

MULTIPLE R-SQUARE 0.1175

STD. ERROR OF EST. 0.4428

## ANALYSIS OF VARIANCE

	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO
REGRESSION	9.4525690	1	9.452569	48.205
RESIDUAL	70.984695	362	0.1960903	

\*The variable "car" was eliminated from the regression because of sampling bias involved.

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## REGRESSION 4: NAVY REGULAR DUTY

## CORRELATION MATRIX

	EDU	1	RACE	2	FORE	3	DELAY	4	MARRIED	5	ARREST	6	READ	7	UCC1	8	UCC2	9	UCC3	10
EDU	1	1.0000																		
RACE	2	0.0291	1.0000																	
FORE	3	0.1921	0.0193	1.0000																
DELAY	4	-0.0943	0.1094	-0.1672	1.0000															
MARRIED	5	0.0058	0.0367	0.1073	0.0050	1.0000														
ARREST	6	0.1648	0.1109	0.0203	-0.0731	-0.0775	1.0000													
READ	7	-0.0538	0.0291	0.0517	0.0533	0.0023	-0.0904	1.0000												
UCC1	8	0.0507	-0.0446	0.0126	-0.0385	0.0984	0.0003	-0.0904	1.0000											
UCC2	9	0.0430	-0.0002	0.0073	0.0244	0.0288	0.0732	-0.0099	-0.0732	1.0000										
UCC3	10	0.1061	-0.0801	0.1389	0.0166	0.0712	0.0129	0.0129	0.1006	-0.0833	1.0000									
UCC4	11	-0.1096	-0.0128	-0.0563	0.0313	-0.0669	-0.1016	-0.0669	-0.1016	0.0399	-0.1181	1.0000								
UCC5	12	-0.0302	0.0744	-0.0364	0.0721	-0.0979	0.0979	-0.0979	-0.0979	-0.1005	-0.1278	-0.1278	1.0000							
UCC6	13	0.0213	0.0501	-0.0098	-0.0706	0.0026	-0.0170	0.0026	-0.0170	-0.2006	-0.1119	-0.1119	-0.1119	1.0000						
SATIS	14	0.1101	-0.1066	-0.0273	-0.1051	-0.0233	-0.0918	-0.0233	-0.0918	-0.1445	0.0250	0.0250	0.0250	0.0250	1.0000					
COMP	15	-0.1461	0.0877	-0.0481	-0.0333	-0.0539	-0.0744	-0.0539	-0.0744	0.0198	-0.0099	-0.0099	-0.0099	-0.0099	-0.0099	1.0000				
AGE	16	0.2829	0.0525	0.0744	0.0719	-0.0035	-0.0729	-0.0035	-0.0729	0.0485	0.0321	0.0321	0.0321	0.0321	0.0321	0.0321	1.0000			
BUDY	17	0.0509	-0.0318	-0.0357	0.0645	-0.0337	0.0944	-0.0337	0.0944	0.0088	-0.0511	-0.0511	-0.0511	-0.0511	-0.0511	-0.0511	-0.0511	1.0000		
CAR	18	-0.1424	0.0507	-0.0715	0.1003	0.0987	-0.0552	0.0987	-0.0552	0.0892	-0.0621	-0.0621	-0.0621	-0.0621	-0.0621	-0.0621	-0.0621	-0.0621	1.0000	
CRUISE	19	-0.0191	0.0452	0.0986	0.0046	-0.0296	0.0360	-0.0296	0.0360	0.0077	-0.0279	-0.0279	-0.0279	-0.0279	-0.0279	-0.0279	-0.0279	-0.0279	-0.0279	1.0000
DEP	20	0.3141	-0.1094	0.3428	-0.0481	0.1742	-0.0547	0.1742	-0.0547	0.0142	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	0.0095	-0.0095
PARENT	21	0.0122	0.0567	-0.0056	0.0619	0.0340	-0.0309	0.0340	-0.0309	0.0068	-0.0136	-0.0136	-0.0136	-0.0136	-0.0136	-0.0136	-0.0136	-0.0136	-0.0136	-0.0136

	UCC4	11	UCC5	12	UCC6	13	SATIS	14	COMP	15	AGE	16	BUDY	17	CAR	18	CRUISE	19	DEP	20
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UCC4	11	1.0000																		
UCC5	12	-0.3196	1.0000																	
UCC6	13	-0.3560	-0.1299	1.0000																
SATIS	14	-0.0746	0.0520	-0.0659	1.0000															
COMP	15	-0.0502	0.0697	0.0308	0.0640	1.0000														
AGE	16	-0.1078	-0.0311	0.0019	0.0069	-0.1203	1.0000													
BUDY	17	-0.0507	-0.0119	-0.1101	-0.0490	-0.0490	-0.0490	1.0000												
CAR	18	0.0110	0.0747	-0.0748	0.1106	0.0699	-0.0041	0.0039	1.0000											
CRUISE	19	-0.0114	-0.0674	0.0652	-0.1755	0.0086	-0.0511	-0.0439	-0.0439	1.0000										
DEP	20	-0.0205	-0.0674	-0.0381	0.0545	-0.0242	0.1039	0.0077	0.0077	-0.0442	1.0000									
PARENT	21	-0.0060	-0.0049	0.1900	-0.0025	0.0452	-0.0205	0.0487	0.0487	0.0175	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040

PARENT	21	1.0000
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## REGRESSION 4: NAVY REGULAR DUTY

SUMMARY TABLE STEP	VARIABLE	ENTERED	REMOVED	R	MULTIPLE RSQ	INCREASE IN RSQ	F-TO- ENTER	F-TO- REMOVE	NUMBER OF INDEPENDENT VARIABLES INCLUDED	LEVEL OF SIGNIFICANCE
1	3 FJRE	ENTERED		0.3428	0.1175	0.1175	48.2051		1	
2	15 CLUP		REMOVED	0.5524	0.2846	0.0071	39.5470		2	
3	1 EDU			0.5013	0.2513	0.0444	22.4141		3	
4	5 MARRIED			0.5176	0.2679	0.0164	8.1440		4	
5	2 RACE			0.5278	0.2786	0.0107	5.3165		5	
6	14 SATIS			0.5348	0.2860	0.0074	3.6997		6	P = .01

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## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	0	Y-INTPT	1	EDU	2	RACE	3	FUME	4	DELAY	5	MARRIED	6	ARREST	7	READ	8	HICI	9	OCC2
STEP																				
0		0.3297*		0.2166	-0.1963		0.0085		-0.0501		0.0673		0.0600		0.0457		0.0165		0.0476	
1		0.1706*		0.1777	-0.2083		0.0085*		0.0098		0.0537		0.0524		-0.0112		0.0089		0.0445	
2		0.6418*		0.1530	-0.1621		0.0079*		-0.0054		0.0486		0.0289		0.0120		0.0044		0.0497	
3		0.1957*		0.1530*	-0.1772		0.0069*		0.0109		0.0501		-0.0984		0.0555		-0.0138		0.0370	
4		0.0515*		0.1546*	-0.1867		0.0065*		0.0082		0.0501*		0.0034		0.0568		-0.0352		0.0320	
5		0.2235*		0.1575*	-0.1867*		0.0066*		0.0219		0.0517*		0.0172		0.0644		-0.0454		0.0314	
6		0.1435*		0.1493*	-0.1880*		0.0067*		0.0301		0.0521*		0.0270		0.0999		-0.0477		0.0217	

## NOTE-

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	10	DCC3	11	DCC4	12	DCC5	13	DCC6	14	SATS	15	DCCP	16	AGE	17	BUDDY	18	CAR	19	CRUISE
STEP																				
0		0.1240		-0.0005	-0.1037		-0.0539		0.0451		-0.2090		0.0271		0.0103		-0.2271		-0.0068	
1		0.0393		0.0177	-0.0846		-0.0492		0.0497		-0.1910		0.0205		0.0266		-0.2005		-0.0121	
2		0.0233		0.0023	-0.0545		-0.0333		0.0586		-0.1910*		0.0119		0.0060		-0.1798		-0.0113	
3		-0.0074		0.0459	-0.0495		-0.0422		0.0462		-0.1724*		-0.0034		-0.0092		-0.1517		-0.0101	
4		-0.0209		0.0334	-0.0366		-0.0432		0.0472		-0.1644*		-0.0029		-0.0037		-0.1693		-0.0093	
5		-0.0376		0.0334	-0.0249		-0.0366		0.0418		-0.1619*		-0.0013		-0.0075		-0.1635		-0.0086	
6		-0.0386		0.0388	-0.0328		-0.0284		0.0418*		-0.1670*		-0.0010		-0.0142		-0.1674		-0.0065	

## NOTE-

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	21	PARENT
STEP		
0		-0.0710
1		-0.0426
2		-0.0314
3		-0.0388
4		-0.0448
5		-0.0395
6		-0.0391

## NOTE-

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP



# REGRESSION 5: RACIAL DIFFERENCES AMONG MARINE CORPS REGULAR DUTY ATTRITERS

REGRESSION TITLE: ..... MARINE REG DUTY ATTRITERS BLACK VS NOT BLACK  
 STEPPING ALGORITHM: .....  
 MAXIMUM NUMBER OF STEPS: .....  
 DEPENDENT VARIABLE: .....  
 MINIMUM ACCEPTABLE F TO ENTER: .....  
 MAXIMUM ACCEPTABLE F TO REMOVE: .....  
 MINIMUM ACCEPTABLE TOLERANCE: .....

STEP NO. 0  
 MULTIPLE R 0.0  
 MULTIPLE R-SQUARE 0.0  
 STD. ERROR OF EST. 0.6708

ANALYSIS OF VARIANCE  
 REGRESSION 0.0  
 RESIDUAL 44.327271  
 SUM OF SQUARES 0.0  
 DF 0  
 MEAN SQUARE 0.0  
 F RATIO 0.0  
 RESIDUAL 200 0.2216363

VARIABLES IN EQUATION				VARIABLES NOT IN EQUATION			
VARIABLE	COEFFICIENT OF COEFF	STD. ERROR	STU REG	VARIABLE	PARTIAL CORR.	TOLERANCE	F TO ENTER LEVEL
(Y-INTERCEPT	1.529 )			EDU	1	0.15827	1.00000
				FORE	2	0.03487	1.00000
				WELF	3	-0.06705	1.00000
				NS	4	-0.05308	1.00000
				ARREST	5	0.07452	1.00000
				READ	6	0.06347	1.00000
				ATTEND	7	0.20515	1.00000
				SATIS	8	0.04245	1.00000
				COMPLA	9	0.00454	1.00000
				AGE	10	0.11081	1.00000
				BUDGY	11	0.00059	1.00000
				CAR	12	0.10301	1.00000
				CRUISE	13	0.03718	1.00000
				PSOB	14	0.11021	1.00000
				SUPR	15	-0.05409	1.00000
				DECI	16	0.03150	1.00000
				DCC2	17	0.00146	1.00000
				DCC3	18	0.04738	1.00000
				DELA	19	-0.18764	1.00000
				UCC5	20	0.07737	1.00000
				UCC6	21	0.04455	1.00000
				PARENT	23	0.24513	1.00000

STEP NO. 1  
 VARIABLE ENTERED 23 PARENT  
 MULTIPLE R 0.2451  
 MULTIPLE R-SQUARE 0.0601  
 STD. ERROR OF EST. 0.4576

ANALYSIS OF VARIANCE  
 REGRESSION 2.4436600  
 SUM OF SQUARES 1  
 DF 1  
 MEAN SQUARE 2.443660  
 F RATIO 12.723

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REGRESSION 5: RACIAL DIFFERENCES AMONG MARINE CORPS REGULAR DUTY ATTRIBUTES

## CORRELATION MATRIX

	EDU	FORE	DELAY	MS	ARREST	READ	ATTEND	SATIS	COMPLA	AGE
	1	2	3	4	5	6	7	8	9	10
EDU	1									
FORE	0.0000	1								
DELAY	-0.0630	0.0000	1							
MS	-0.0743	-0.0352	0.0000	1						
ARREST	0.0496	-0.1565	0.0230	0.0000	1					
READ	0.1625	0.0615	-0.0813	0.0786	0.0000	1				
ATTEND	-0.2145	-0.0552	0.0390	-0.0961	-0.1166	0.1632	1			
SATIS	-0.0877	0.0035	0.1459	-0.1555	-0.1014	0.1432	0.0000	1		
COMPLA	0.0881	-0.1415	0.1455	-0.1159	0.0616	0.0470	0.6429	0.0000	1	
AGE	-0.0813	-0.0977	-0.0633	-0.0471	-0.0297	0.0360	0.0965	0.0544	0.0000	1
EDU	0.0345	-0.0894	0.0504	-0.1526	-0.2355	-0.0224	0.0833	0.0358	-0.0323	0.0000
FORE	0.1126	-0.0044	0.1086	-0.0035	0.1227	0.0423	0.0377	-0.0438	0.2546	0.0490
DELAY	-0.0667	0.0652	0.1026	-0.1113	-0.1132	0.0692	0.2670	0.0380	0.8929	0.1116
MS	-0.0987	0.0747	-0.0331	-0.0263	0.1593	-0.0877	-0.0174	-0.0730	0.0412	-0.0433
ARREST	-0.1344	0.1131	-0.0115	-0.2741	-0.0713	0.0017	0.1631	-0.0771	0.1163	0.0547
READ	0.0325	-0.0778	-0.0997	0.0727	-0.0916	0.0160	-0.0911	-0.0243	0.0051	-0.0209
ATTEND	0.1501	0.1220	-0.0625	0.0132	-0.1433	-0.0782	-0.0946	-0.1250	0.0099	-0.0145
SATIS	0.0136	-0.0785	-0.0325	0.0477	0.1579	-0.0179	0.0246	0.0062	-0.0663	-0.0281
COMPLA	-0.0611	-0.2237	-0.0803	0.0280	-0.0861	0.0446	-0.0483	-0.0343	0.0645	0.0913
AGE	0.0097	-0.1675	-0.0790	-0.0247	-0.0039	-0.0838	-0.0258	0.0794	0.0254	-0.1643
EDU	-0.0617	0.0096	0.0123	-0.1393	-0.1192	0.0490	-0.0340	-0.0526	-0.0469	0.1350
FORE	-0.0302	0.0184	0.7030	-0.0948	-0.0455	-0.0012	0.0810	0.0441	0.0191	0.1375
DELAY	0.1593	-0.0309	-0.0670	-0.0530	0.0745	0.3635	0.2081	0.0825	0.0846	0.1108
MS	-0.1009	0.0012	0.0338	-0.1604	-0.1785	0.1908	0.1266	-0.0322	-0.0000	0.2210

	EDU	FORE	DELAY	MS	ARREST	READ	ATTEND	SATIS	COMPLA	AGE
	1	2	3	4	5	6	7	8	9	10
EDU	1									
FORE	0.0000	1								
DELAY	0.1119	0.0000	1							
MS	0.0470	-0.1160	0.0000	1						
ARREST	-0.1568	0.0652	-0.0374	0.0000	1					
READ	0.1831	-0.0294	-0.1237	-0.2320	0.0000	1				
ATTEND	0.1296	-0.0848	0.0387	0.0799	0.0634	0.0000	1			
SATIS	0.0333	0.0408	0.1392	0.0098	-0.0945	-0.0945	0.0000	1		
COMPLA	-0.0144	-0.0323	-0.0614	-0.0319	-0.0663	-0.0663	-0.0904	0.0000	1	
AGE	-0.0998	0.0020	-0.0873	0.0366	-0.0945	-0.2540	-0.3472	-0.2433	0.0000	1
EDU	0.0062	-0.0726	0.0152	0.1441	0.0528	-0.1036	-0.1416	-0.0993	-0.3804	0.0000
FORE	0.0247	0.1114	-0.0025	-0.0242	0.0317	-0.1080	-0.1675	-0.1035	-0.2366	-0.1618
DELAY	0.0007	0.1030	0.0372	0.1132	-0.0541	0.0315	0.0815	0.0474	-0.1076	0.0974
MS	0.0168	0.2247	-0.0345	0.1880	-0.0503	-0.0605	0.0828	0.0733	-0.0823	-0.3641

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EDU 21 1.0000  
FORE 22 0.0000  
DELAY 23 0.0000EDU 21 1.0000  
FORE 22 0.0000  
DELAY 23 0.0000

REGRESSION 5: RACIAL DIFFERENCES AMONG MARINE CORPS REGULAR DUTY ATTRITERS

SUMMARY TABLE STEP NO.	VARIABLE ENTERED	R	MULTIPLE R SQ	INCREASE IN R SQ	F-TU- ENTER	F-TU- REMOVE	NUMBER OF INDEPENDENT VARIABLES INCLUDED	LEVEL OF SIGNIFICANCE
1	23 PARENT	0.2451	0.0601	0.0601	12.7226		1	
2	1 EDU	0.3074	0.0945	0.0344	7.5275		2	
3	7 ATTEND	0.3630	0.1318	0.0373	8.6550		3	
4	19 DECA	0.3989	0.1591	0.0273	6.3651		4	
5	5 ADREST	0.4124	0.1700	0.0110	2.5754		5	
6	20 DECS	0.4210	0.1772	0.0072	1.6946		6	
7	3 DELAY	0.4283	0.1834	0.0062	1.6571		7	
8	8 SATIS	0.4372	0.1911	0.0077	1.8372		8	p = .01

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## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	0	1	2	3	4	5	6	7	8	9
STEP	Y-INTCPT	EDU	FORE	DELAY	MS	ARREST	READ	ATTEND	SATIS	COMPLA
0	1.323*	0.1150	0.0009	-0.0661	-0.0212	0.0740	0.0848	0.1956	0.0362	0.0644
1	0.973*	0.1356	0.0009	-0.0743	-0.0056	0.1213	0.0232	0.1691	0.0375	0.0734
2	0.6295*	0.1356*	0.0012	-0.0652	-0.0081	0.0959	0.0765	0.1834	0.0311	0.0629
3	0.3656*	0.1462*	0.0012	-0.0943	0.0026	0.1195	0.0421	0.1834*	0.0259	0.0473
4	0.4638*	0.1462*	0.0004	-0.0808	-0.0002	0.1071	0.0455	0.1809*	0.0325	0.0503
5	0.2753*	0.1352*	0.0003	-0.0749	-0.0018	0.1071*	0.0528	0.1881*	0.0312	0.0538
6	0.1929*	0.1387*	0.0004	-0.0788	0.0046	0.1196*	0.0464	0.1924*	0.0317	0.0564
7	0.3121*	0.1369*	0.0004	-0.0788*	0.0068	0.1150*	0.0462	0.2032*	0.0372	0.0533
8	0.2756*	0.1311*	0.0007	-0.0916*	0.0120	0.1121*	0.0379	0.2061*	0.0372*	0.0501

NOTE-

- 1) REGRESSION COEFFICIENTS FOR VARIABLES IN THE EQUATION ARE INDICATED BY AN ASTERISK  
 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	10	11	12	13	14	15	16	17	18	19
STEP	AGE	BUDDY	CAR	CRUISE	PROB	SUPR	OCC1	OCC2	OCC3	OCC4
0	0.0351	0.0007	0.1466	0.0190	0.1067	-0.0550	0.0601	0.1202	0.0939	-0.1763
1	0.0189	-0.0035	0.0718	0.0234	0.0643	-0.0426	0.0935	0.0908	0.0827	-0.1585
2	0.0153	-0.0257	0.0776	0.0144	0.0806	-0.0479	0.0987	0.0847	0.1047	-0.1586
3	0.0115	-0.0347	0.0149	0.0150	0.0554	-0.0316	0.0774	0.0801	0.0890	-0.1559
4	0.0015	-0.0518	0.0212	0.0073	0.0596	-0.0473	-0.0089	-0.0042	0.0100	-0.1559*
5	0.0115	-0.0651	0.0300	-0.0004	0.0614	-0.0352	-0.0322	-0.0351	0.0274	-0.1538*
6	0.0093	-0.0645	0.0382	-0.0005	0.0477	-0.0352	-0.0058	0.0052	0.0718	-0.1197*
7	0.0103	-0.0550	0.0421	-0.0010	0.0434	-0.0426	0.0020	0.0073	0.0606	-0.1120*
8	0.0088	-0.0486	0.0379	0.0027	0.0517	-0.0425	0.0300	0.0036	0.0613	-0.1168*

NOTE-

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## STEPWISE REGRESSION COEFFICIENTS

VARIABLES	20	21	22	23
STEP	OCC5	OCC6	PARENT	
0	0.1341	0.0595	0.2309	
1	0.1493	0.0187	0.2309*	
2	0.1671	0.0230	0.2497*	
3	0.1763	0.0061	0.2279*	
4	0.1034	-0.0956	0.2153*	
5	0.1284	-0.0882	0.2312*	
6	0.1284*	-0.0484	0.2399*	
7	0.1338*	-0.0434	0.2410*	
8	0.1367*	-0.0551	0.2428*	

NOTE-

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 2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

# REGRESSION 6: RACIAL DIFFERENCES AMONG NAVY REGULAR ATTRITERS

REGRESSION TITLE: . . . . . NAVY REG OUT / ATTRITERS BLACK VS NOT BLACK  
 STEPPING ALGORITHM: . . . . . F  
 MAXIMUM NUMBER OF STEPS: . . . . . 46  
 DEPENDENT VARIABLE: . . . . . 22 RACE  
 MINIMUM ACCEPTABLE F TO ENTER: . . . . . 1.100  
 MAXIMUM ACCEPTABLE F TO REMOVE: . . . . . 1.000  
 MINIMUM ACCEPTABLE TOLERANCE: . . . . . 0.01000

STEP NO. 0

MULTIPLE R 0.0  
 MULTIPLE R-SQUARE 0.0  
 STD. ERROR OF EST. 0.2928

## ANALYSIS OF VARIANCE

SUM OF SQUARES DF MEAN SQUARE F RATIO  
 REGRESSION 0.0 0.0  
 RESIDUAL 20.830688 243 0.8572298E-01 9.0

## VARIABLES IN EQUATION

VARIABLE	COEFFICIENT OF COEFF	STD. ERROR	STD REG COEFF	F TO REMOVE LEVEL	VARIABLE	PARTIAL CORR.	TOLERANCE	F TO ENTER LEVEL
(Y-INTERCEPT	1.0941				EDU	1 0.07269	1.00000	1.286
					FOME	2 0.03290	1.00000	0.262
					DELAY	3 0.10170	1.00000	2.529
					MS	4 0.09465	1.00000	2.282
					ARREST	5 0.12622	1.00000	3.918
					READ	6 0.05231	1.00000	0.664
					ATTEND	7 0.20265	1.00000	10.364
					SATIS	8 -0.09727	1.00000	2.312
					CUMPLA	9 0.10531	1.00000	2.714
					AGE	10 0.06477	1.00000	1.084
					BUDDY	11 -0.02400	1.00000	0.139
					CAR	12 0.02919	1.00000	0.266
					CRUISE	13 0.06293	1.00000	0.447
					PROB	14 -0.02976	1.00000	0.215
					SUPR	15 -0.07950	1.00000	1.539
					OCC1	16 -0.04141	1.00000	0.416
					OCC2	17 -0.00830	1.00000	0.017
					OCC3	18 -0.00256	1.00000	1.661
					OCC4	19 -0.02097	1.00000	0.106
					OCC5	20 0.05489	1.00000	0.731
					OCC6	21 0.07749	1.00000	1.462
					PARENT	23 0.07024	1.00000	1.200

STEP NO. 1

VARIABLE ENTERED 7 ATTEND  
 MULTIPLE R 0.2026  
 MULTIPLE R-SQUARE 0.0411  
 STD. ERROR OF EST. 0.2873

## ANALYSIS OF VARIANCE

SUM OF SQUARES DF MEAN SQUARE F RATIO  
 REGRESSION 0.8554498 1 0.8554498 10.364

REGRESSION 6: RACIAL DIFFERENCES AMONG NAVY REGULAR ATTRIBUTES

CORRELATION MATRIX

	EDU	FOR	DEL	MS	ARREST	READ	ATTEND	SATIS	COMPLA	AGE
	1	2	3	4	5	6	7	8	9	10
EDU	1									
FOR	2	1.0000								
DEL	3	0.1325	1.0000							
MS	4	-0.1691	-0.2153	1.0000						
ARREST	5	0.0683	0.0396	-0.1276	1.0000					
READ	6	0.0647	-0.0368	0.0881	-0.0462	1.0000				
ATTEND	7	-0.0807	-0.0434	0.2970	-0.0091	0.0629	1.0000			
SATIS	8	0.1059	-0.1205	-0.1074	-0.1313	-0.1343	-0.0090	1.0000		
COMPLA	9	-0.0645	0.0679	-0.0226	0.0005	0.0954	0.1144	0.0302	1.0000	
AGE	10	-0.2592	0.0153	-0.0042	-0.0254	-0.0577	-0.0211	0.0646	-0.0573	1.0000
EDU	11	0.0071	-0.1128	0.0328	-0.0652	-0.0214	-0.0544	0.0231	0.0134	0.1333
FOR	12	-0.1417	-0.0068	0.0294	0.1264	0.0641	0.1038	0.1603	0.0154	-0.0041
DEL	13	0.0496	0.0950	0.1318	-0.0024	-0.0818	-0.0332	-0.1603	0.0154	-0.0951
MS	14	-0.0829	-0.1012	0.1007	-0.3357	0.0304	0.0766	-0.0431	0.1366	-0.1282
ARREST	15	-0.1046	0.0426	-0.1012	-0.0035	-0.0077	0.1106	-0.0184	0.0041	-0.0323
READ	16	0.0654	-0.0435	-0.0641	0.0605	-0.0420	-0.0125	0.0090	0.0041	-0.0201
ATTEND	17	0.0338	0.0223	0.0319	0.0304	-0.0582	-0.0543	0.0555	0.0115	0.0930
SATIS	18	0.0819	0.0661	0.0022	-0.0050	-0.0370	-0.0644	0.0871	-0.0371	-0.0360
COMPLA	19	-0.0606	-0.0264	-0.0709	-0.1074	0.0965	0.1283	-0.0781	0.0870	-0.0169
AGE	20	-0.0046	-0.0218	0.0241	-0.0798	-0.0531	-0.0855	0.0421	0.0037	0.0158
EDU	21	-0.0114	-0.0241	-0.1099	-0.0939	0.0274	0.0037	-0.0503	0.1053	0.0658
FOR	22	0.0727	0.0329	0.1017	0.0967	-0.0522	0.2026	-0.0973	0.0540	-0.0115
DEL	23	-0.0538	-0.0368	0.0880	-0.0065	0.1277	-0.0622	-0.0217	0.0540	-0.0115

	BUDDY	CAR	CRUISE	PROB	SUPR	OCC1	OCC2	OCC3	OCC4	OCC5
	11	12	13	14	15	16	17	18	19	20
BUDDY	11									
CAR	12	1.0000								
CRUISE	13	-0.0593	1.0000							
PROB	14	0.1236	0.0754	1.0000						
SUPR	15	-0.0387	-0.1802	-0.0439	1.0000					
OCC1	16	-0.0516	0.0779	0.0950	-0.0357	1.0000				
OCC2	17	0.0005	0.0183	0.0850	-0.1317	-0.0744	1.0000			
OCC3	18	-0.0379	0.1133	-0.0226	0.0209	-0.2721	-0.1030	1.0000		
OCC4	19	-0.0273	0.0375	-0.0721	-0.0264	-0.1067	-0.1678	-0.2397	1.0000	
OCC5	20	0.0100	-0.0084	-0.0503	0.1434	-0.1149	-0.1591	-0.1012	-0.3439	1.0000
BUDDY	21	0.0969	0.0338	0.1170	0.0869	-0.1149	-0.0083	-0.0826	-0.0210	0.0549
CAR	22	-0.0240	0.0292	0.0429	-0.0795	0.0841	0.0078	-0.0915	-0.0767	-0.0475
CRUISE	23	0.0819	-0.0477	0.0540	-0.0306	-0.0289	0.0078	-0.0915	-0.0767	-0.0475

	OCC6	RACE	PARENT
	21	22	23
OCC6	21	1.0000	
RACE	22	0.0775	1.0000
PARENT	23	0.1906	0.0702

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REGRESSION 6: RACIAL DIFFERENCES AMONG NAVY REGULAR ATTRITERS

SUMMARY STEP	TABLE ENTERED	VARIABLE REMOVED	R	MULTIPLE RSG	INCREASE IN RSG	F-TO- ENTER	F-TO- REMOVE	NUMBER OF INDEPENDENT VARIABLES INCLUDED	LEVEL OF SIGNIFICANCE
1	7 ATTEND		0.2026	0.0411	0.0411	10.3636		1	
2	5 ARREST		0.2397	0.0575	0.0164	4.1931		2	
3	4 MS		0.2872	0.0714	0.0139	3.5944		3	
4	1 EUU		0.2855	0.0815	0.0101	2.6349		4	
5	9 CUMPLA		0.3026	0.0916	0.0101	2.6388		5	
6	15 SUPR		0.3156	0.0996	0.0081	2.1214		6	
7	8 SATIS		0.3284	0.1078	0.0082	2.1666		7	
8	23 PARENT		0.3377	0.1146	0.0062	1.6554		8	
9	20 ULC5		0.3451	0.1191	0.0051	1.3441		9	P = .01
10	21 OCC6		0.3516	0.1237	0.0046	1.2153		10	

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## STEPWISE REGRESSION COEFFICIENTS

STEP	VARIABLES	0	Y-INTCPT	1	EDU	2	FORE	3	DELAY	4	MS	5	ARREST	6	READ	7	ATTEND	8	SATIS	9	COMPLA
0		1.0942*		0.0330	0.0006			0.0669	0.0226			0.0843	0.1079		0.1214		0.1214		-0.0295		0.0412
1		0.9255*		0.0465	0.0010			0.0299	0.0221			0.0855	0.0821		0.1214*		0.1214*		-0.0279		0.0372
2		0.7756*		0.0429	0.0011			0.0422	0.0279			0.0855*	0.1133		0.1221*		0.1221*		-0.0234		0.0426
3		0.6821*		0.0464	0.0011			0.0366	0.0279*			0.0939*	0.1292		0.1224*		0.1224*		-0.0202		0.0433
4		0.5531*		0.0464*	0.0009			0.0461	0.0293*			0.0939*	0.1465		0.1307*		0.1307*		-0.0238		0.0455
5		0.4287*		0.0484*	0.0008			0.0482	0.0297*			0.0939*	0.1313		0.1242*		0.1242*		-0.0261		0.0455*
6		0.4542*		0.0453*	0.0009			0.0527	0.0272*			0.0841*	0.1231		0.1289*		0.1289*		-0.0271*		0.0501*
7		0.5136*		0.0499*	0.0007			0.0464	0.0272*			0.0841*	0.0952		0.1289*		0.1289*		-0.0271*		0.0533*
8		0.4387*		0.0520*	0.0008			0.0412	0.0275*			0.0858*	0.0769		0.1314*		0.1314*		-0.0265*		0.0511*
9		0.4362*		0.0529*	0.0008			0.0374	0.0286*			0.0806*	0.0828		0.1360*		0.1360*		-0.0274*		0.0478*
10		0.4410*		0.0525*	0.0003			0.0459	0.0272*			0.0810*	0.0834		0.1361*		0.1361*		-0.0267*		0.0477*

## NOTE-

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2) THE REMAINING COEFFICIENTS ARE THOSE WHICH WOULD BE OBTAINED IF THAT VARIABLE WERE TO ENTER IN THE NEXT STEP

## STEPWISE REGRESSION COEFFICIENTS

STEP	VARIABLES	10	AGE	11	BUDDY	12	CAR	13	CRUISE	14	PRUB	15	SUPR	16	DCC1	17	DCC2	18	DCC3	19	DCC4
0		0.0106		-0.0198	0.0230			0.0041	-0.019*			-0.0470	-0.0452		-0.0070		-0.0070		-0.1004		-0.0123
1		0.0113		-0.0040	0.0065			0.0047	-0.0290			-0.0610	-0.0424		-0.0023		-0.0023		-0.0849		-0.0280
2		0.0138		-0.0059	0.0098			0.0040	-0.0379			-0.0528	-0.0419		-0.0058		-0.0058		-0.0940		-0.0217
3		0.0147		0.0003	-0.0018			0.0039	-0.0149			-0.0514	-0.0499		-0.0101		-0.0101		-0.0931		-0.0133
4		0.0111		0.0012	0.0081			0.0035	-0.0077			-0.0458	-0.0376		-0.0089		-0.0089		-0.1076		-0.0105
5		0.0115		0.0086	0.0085			0.0032	-0.0039			-0.0543	-0.0286		-0.0110		-0.0110		-0.1010		-0.0067
6		0.0098		0.0071	0.0211			0.0038	-0.0074			-0.0543*	-0.0582		-0.0129		-0.0129		-0.0964		-0.0095
7		0.0075		0.0124	0.0252			0.0025	-0.0024			-0.0562*	-0.0576		-0.0076		-0.0076		-0.0867		-0.0149
8		0.0095		0.0069	0.0280			0.0021	-0.0095			-0.0542*	-0.0605		-0.0080		-0.0080		-0.0792		-0.0110
9		0.0095		0.0065	0.0260			0.0024	-0.0167			-0.0552*	-0.0552*		-0.0021		-0.0021		-0.0712		0.0042
10		0.0092		0.0010	0.0335			0.0018	-0.0128			-0.0574*	-0.0431		-0.0136		-0.0136		-0.0627		0.0295

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## STEPWISE REGRESSION COEFFICIENTS

STEP	VARIABLES	20	DCC5	21	DCC6	23	PARENT
0		0.0496		0.0662	0.0424		
1		0.0657		0.0656	0.0477		
2		0.0546		0.0701	0.0500		
3		0.0619		0.0616	0.0508		
4		0.0645		0.0619	0.0546		
5		0.0555		0.0618	0.0515		
6		0.0573		0.0654	0.0493		
7		0.0613		0.0619	0.0479		
8		0.0655		0.0507	0.0479*		
9		0.0655*		0.0598	0.0503*		

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APPENDIX B

Navy Regular Duty Attriter  
and Marine Recruit Supervisor  
Questionnaires

NATIONAL ANALYSTS  
Philadelphia, PA

BuPers Report Symbol 5314-55  
Study #1-555  
Summer, 1976

MILITARY PERSONNEL STUDY

Version 8

Navy Regular Duty, Attriter

Time Interview Began: \_\_\_\_\_ A.M.  
P.M.

Time Interview Ended: \_\_\_\_\_ A.M.  
P.M.

Interviewer's Name: \_\_\_\_\_

Date: \_\_\_\_\_

PRIVACY ACT

Hello, I'm \_\_\_\_\_ from National Analysts, a survey research company in Philadelphia. Under the authority of 5USC301, information regarding your personal opinion of Navy life is requested to assist in research on personnel losses in the Navy. The information provided by you will not become a permanent part of any record. The information will not be divulged without your written authorization to anyone other than to assist in statistical analyses, and reporting of the data by authorized personnel of the civilian contractor, and the Department of Defense and other such users as required by law. You are not required to provide this information; there will be no adverse consequences should you elect not to provide the requested information or any part of it.

1. To begin with, I'd like to ask about some of your experiences before joining the Navy. When did you first consider joining the Navy?  
Was it:

## READ

Two weeks or less before signing up,	1
About three weeks or a month,	2
Between a month and six months,	3
Six months to a year, or	4
Over a year before signing up?	5

2. Did you discuss your decision with your family, friends or anyone else other than a recruiter?

Yes	1
No	2

(SKIP TO Q.5)

3. With whom did you discuss it? Was there anyone else? CIRCLE CODE FOR ALL MENTIONED IN Q.3 COLUMN BELOW)

4. (ASK FOR EACH PERSON CIRCLED IN Q.3 COLUMN) How did your (PERSON) feel about your joining the Navy? Would you say he/she favored it, was neutral, or was against it? (CIRCLE CODE IN Q.4 COLUMN FOR EACH CODE CIRCLED IN Q.3)

	Q.3	Q.4		
	Discussed with	Favored	Neutral (Mixed)	Against
Father	1	1	2	3
Mother	2	1	2	3
Teacher	3	1	2	3
Brother	4	1	2	3
Male friend	5	1	2	3
Female friend	6	1	2	3
Other (SPECIFY)				
	*	1	2	3
	*	1	2	3

5. Did you talk with anyone who had been in the Navy other than a recruiter about what recruit training would be like?

	Yes	1
(SKIP TO Q.8)	No	2

6. Was recruit training like they told you it would be, or was it different?

(SKIP TO Q.8)	Like they told you	1
	Different	2

7. How was it different?

8. Did you contact the recruiter first, or did he contact you first?

Respondent contacted recruiter first	1
Recruiter contacted respondent first	2

9. (HAND CARD A) Did your recruiter do any of the following: (READ LIST AND RECORD YES OR NO IN Q.9 COLUMN)

10. (ASK IF MORE THAN ONE "YES" IN Q.9) Which one of these most influenced your decision to enlist? (READ EACH "YES" IN Q.9. CIRCLE ONE CODE IN Q.10 COLUMN)

READ	Q.9		Q.10
	Yes	No	
A Send you letters or give you brochures about the Navy	1	*	1
B Speak at a group meeting you attended,	2	*	2
C Show you a film,	3	*	3
D Take you to a Navy installation or ship	4	*	4
E Tell you about training school opportunities in the Navy	5	*	5

11. How complete a description of recruit training did the recruiter give you? Was it:

(SKIP TO Q.13)	READ	
	Generally complete,	1
	Only partly complete, or	2
	Not at all complete?	3

12. What were some things about recruit training that he did not tell you?

13. Please tell me if the recruiter told you about any of the following. Did he tell you about:

READ	Yes	No
The daily schedule followed in recruit training	1	*
The harassment you might get from company commanders	2	*
The amount of physical exercise and conditioning in training	3	*
The procedures for applying to a school	4	*
The type of duty assignments available after recruit training	5	*
How much pay you receive on reaching grade E-3	6	*
The number of weeks of recruit training	7	*
The types of behavior that are punished by discharge	8	*
The type of discharge received if someone is dismissed for bad behavior	9	*
The procedures for making a complaint about one of your supervisors	0	*
The purpose of the battery of classification tests that you took at the start of training	V	*

14. Did you talk to recruiters from the:

READ	Yes	No
Army?	1	*
Marines?	2	*
Air Force?	3	*

15. Were you employed on a full-time job at the time you enlisted?

Yes	1
No	2

(SKIP TO Q.17)

16. What was your average weekly take-home pay? (RECORD AMOUNT)

\$ \_\_\_\_\_

17. What was the last grade in school you completed?

8th grade or less	1
9th to 11th grade	2
12th grade	3
Some college	4
College graduate	5

18. Do you expect to get any more formal education after you leave the Navy?

Yes	1
No	2
Not sure	3

(SKIP TO Q.20)

19. Altogether, how much more education do you expect to get?

Complete high school	1
Some college	2
Complete college	3
Graduate or professional school	4
Technical training (outside service)	5
Other	6

20. Are you married, engaged, or going with a girlfriend now?

(SKIP TO Q.22)	Married	1
	Engaged	2
	Going with a girl	3
(SKIP TO Q.23)	None of these	4

21. Do you expect to get married within the next three months?

Yes	1
No	2
Don't know	3

22. Does your (wife/fiancee/girlfriend) want you to get out of the Navy or does she prefer that you stay in?

Wants him to get out	1
Prefers he stays in	2
Neutral	3

23. (HAND CARD B) Now I'll read you a list of reasons why someone might join the Navy. Please tell me how important each of those reasons was in influencing you to enlist. How about (READ FIRST REASON)? How important was this in influencing your decision to enlist? Was it Very Important, Somewhat Important, Not Very Important or Not Important at All? (CONTINUE WITH OTHER REASONS)

READ REASONS	Very Important	Somewhat Important	Not Very Important	Not Important at All
Not having a good job at the time	1	2	3	4
The opportunity to learn a skill or trade in the Navy	1	2	3	4
Things the recruiter told you	1	2	3	4
Encouragement from your family or friends	1	2	3	4
The desire to be independent	1	2	3	4
The desire to prove you were good enough to be a sailor	1	2	3	4
The opportunity to travel	1	2	3	4
Wanting to develop into more of a man	1	2	3	4
Wanting to get away from problems you had	1	2	3	4
The opportunity to serve and defend your country	1	2	3	4
Wanting to be eligible for the G.I. Bill	1	2	3	4
Wanting to spend some time in the service until you decide what you wanted to do in life	1	2	3	4

24. If, at the time you completed recruit training, the Navy wanted to have a cutback in manpower and they offered to release you from the service with an honorable discharge and entitlement to full benefits, would you have:

(READ)

DO NOT READ

Accepted the discharge, or	1
Stayed in?	2
Aren't you sure what you would have done	V

25. THIS QUESTION NOT USED.

26. Were you made a squad leader or RCPO, or given any other leadership assignments in recruit training?

(SKIP TO Q.28)

Yes	1
No	2

27. Would you like to have been a squad leader?

Yes	1
No	2

28. When you were in recruit training, did you make any personal requests from your company commander?

(SKIP TO Q.31)

Yes	1
No	2

29. What did you request?



30. How did this person react to your requests? (Could you say:

He did what he could to help you, or	1
He didn't try to help you	2

31. Please tell me which of these were covered in your recruit training instructions? How about:

READ	Yes	No
The type of duty assignments available after you completed training	1	*
The pay you would receive on regular duty as an E-3	2	*
The type of discharge you would receive if you were dismissed for bad behavior	3	*
The procedures for expressing a complaint against one of your supervisors	4	*
The procedures for applying to a school	5	*

32. Were you in the Delayed Enlistment Program?

Yes	1
No	2

33. In general, how satisfied were you with the Navy at the time you completed recruit training? Would you say you were:

READ	
Very satisfied,	1
Somewhat satisfied,	2
Somewhat dissatisfied or	3
Very dissatisfied?	4

34. (HAND CARD C) This card lists six factors that might cause someone to dislike the Navy. Please tell me which of these factors cause you dissatisfaction and which do not.  
IF MORE THAN ONE "YES" CIRCLED ASK: Which one of these causes you the most problems? CIRCLE ONE CODE IN Q.34A COLUMN.

	Q.34		Q.34A COL.
	Yes	No	
1. Not enough free time each day	1	*	1
2. Not being able to go home frequently	2	*	2
3. Strict rules and regulations	3	*	3
4. Harassment from superiors	4	*	4
5. Duty assignments you have had	5	*	5
6. Having no one to take your complaints to	6	*	6

35. When you leave the Navy, what do you think your chances of getting a good job will be? Will they be:

READ

Very good,	1
Good,	2
Not too good, or	3
Bad?	4

36. When you first came to recruit training, you took a battery of classification tests. How important do you think these test results were for determining the type of duty you had? Would you say they were:

READ

Very important,	1
Somewhat important,	2
Not very important, or	3
Not at all important?	4

37. Were there any men in your unit with whom you did not get along?

	Yes	1
(SKIP TO Q. 39)	No	2

38. Why didn't you get along with them?

39. If you wished to complain about your immediate supervisor would you prefer to:

Use the chain of command, or	1
Go directly to your commanding officer	2

40. Since recruit training, have you had any supervisors who did something that you feel should have been reported to the proper officials?

	Yes	1
(SKIP TO Q. 45)	No	2

41. Did you make a complaint?

	Yes	1
(SKIP TO Q. 44)	No	2

42. Was your complaint handled satisfactorily?

	Yes	1
	No	2

43. Were you harassed because you made the complaint?

	Yes	1
	No	2

GO TO Q. 45

44. Why didn't you make a complaint?

45. Which of the following would happen if you made a complaint about a supervisor?

READ

The supervisor would be reprimanded and nothing would happen to you,	1
The supervisor would be reprimanded, but you would be harassed for complaining; or	2
Nothing would happen to the supervisor and you would be harassed for complaining?	3

46. How do you think most enlisted men in the fleet feel about complaining about their supervisors? Do you think they:

READ

Are afraid to complain because of the harassment they might get, or	1
Do not complain because it won't do any good, or	2
Are not afraid to complain whenever they feel a need to?	3

47. Have you received any type of punishment since you have been in the Navy? (11)

	Yes	1
(SKIP TO Q. 49)	No	2

48. What type of punishment have you received and how often did you receive it? (CIRCLE CODE FOR EACH RECEIVED AND RECORD NUMBER OF TIMES RECEIVED)

		# OF TIMES RECEIVED
Fine	1	
Reduction in rank	2	
Extra duty/K.P.	3	
Restriction	4	
Loss of privilege	5	
Correctional custody	6	
Other (SPECIFY):	0	

49. Have there been any incidents for which you might have been punished but were given a break by your supervisor?

	Yes	1
(SKIP TO Q. 51)	No	2

50. How many times did this happen? (RECORD NUMBER)

# OF TIMES: \_\_\_\_\_

51. Have you gone to a Class "A" school?

	Yes	1
(SKIP TO Q. 58)	No	2

52. Which one?

53. Did you apply for or request this school?

	Yes	1
(SKIP TO Q.56)	No	2

54. Was that before or after you enlisted?

	Before	1
	After	2

55. Did you request this training because you felt it would help you get a more interesting assignment, or because you felt the training would be valuable to you when you are back in civilian life?

(CIRCLE ONLY ONE)

More interesting assignment	1
Valuable in civilian life	2

56. How much do you think the training you received will help you in finding employment when you get out of the Navy: Will it be:

Of little or no value,	1
Of some value, or	2
Very valuable?	3

57. Did you graduate from this school or complete the entire program?

Yes	1
No	2

SKIP TO Q.61

58. Since you completed recruit training, have any of your supervisors encouraged you to apply for a school?

Yes	1
No	2

59. Have you ever applied for a school and been turned down?

Yes	1
No	2

60. Would you like to have gone to a Class "A" school?

Yes	1
No	2

61. Have you ever been instructed on how to apply for a change of duty station?

Yes	1
No	2

62. Have you ever applied for a change of duty station?

Yes	1
No	2

(SKIP TO Q.66)

63. How many times did you apply?

IF ONCE, ASK Q.64

IF MORE THAN ONCE, ASK Q.65

64. Was your request granted?

Yes	1
No	2

SKIP TO Q.66

65. How many times were your requests granted?

66. Have you ever been given instructions on how to apply for a change of job assignment?

Yes	1
No	2

67. Did you ever apply for a change of job assignment?

Yes	1
No	2

(SKIP TO Q.71)

68. How many times?

IF ONCE, ASK Q.69

IF MORE THAN ONCE, ASK Q.70

69. Was it granted?

Yes	1
No	2

SKIP TO Q.71

70. How many times were your requests granted?

71. How many times have you been home since you finished recruit training?

72. Were all of these visits on authorized leave, or were any of them unauthorized?

All on authorized leave	1
Some unauthorized	2

73. Do you have a car with you at this base?

Yes	1
No	2

74. How many cruises have you gone on?

(IF NONE ASK Q.75 - OTHERWISE SKIP TO Q.76)

75. Would you like to have gone on some cruises?

Yes	1
No	2

SKIP TO Q.77

76. Would you like to have spent more time or less time on cruises, or are you satisfied with the amount of time you have spent?

Like more time	1
Like less time	2
Satisfied	3

77. For how many months did you have your last regular assignment?

# OF MONTHS: \_\_\_\_\_

78. On your last regular assignment, how many nights a week did you usually get duty?

# OF NIGHTS: \_\_\_\_\_

79. On your last regular assignment, how many weekends a month did you usually get duty?

# OF WEEKENDS: \_\_\_\_\_

70. How many times were your requests granted? \_\_\_\_\_

71. How many times have you been home since you finished recruit training? \_\_\_\_\_

72. Were all of these visits on authorized leave, or were any of them unauthorized?

All on authorized leave	1
Some unauthorized	2

73. Do you have a car with you at this base?

Yes	1
No	2

74. How many cruises have you gone on? \_\_\_\_\_

(IF NONE ASK Q.75 - OTHERWISE SKIP TO Q.76)

75. Would you like to have gone on some cruises?

Yes	1
No	2

SKIP TO Q.77

76. Would you like to have spent more time or less time on cruises, or are you satisfied with the amount of time you have spent?

Like more time	1
Like less time	2
Satisfied	3

77. For how many months did you have your last regular assignment?

# OF MONTHS: \_\_\_\_\_

78. On your last regular assignment, how many nights a week did you usually get duty?

# OF NIGHTS: \_\_\_\_\_

79. On your last regular assignment, how many weekends a month did you usually get duty?

# OF WEEKENDS: \_\_\_\_\_



128.

80. (HAND CARD G) No. I would like to ask you (out several factors that may be important to you as a sailor. This card lists the twelve factors we will cover. I will ask five questions that I will ask about each factor.

NOTE: ASK ALL FIVE QUESTIONS FOR EACH FACTOR BEFORE GOING ON TO THE NEXT FACTOR

- A. First, what about (READ FIRST FACTOR): Was this similar to what you expected, or different? CIRCLE CODE IN COL. (A).
  - B. How important was (READ FIRST FACTOR): Was it Very Important, Somewhat Important, or Not at All Important? CIRCLE CODE IN COL. (B).
  - C. And how satisfied were you with (READ FIRST FACTOR): Were you Very Satisfied, Somewhat Satisfied, or Dissatisfied? CIRCLE CODE IN COL. (C).
  - D. (ASK ONLY IF RESPONDENT WAS "DISSATISFIED") Do you think that (READ FIRST FACTOR) should have improved if you stayed in the service or not? CIRCLE CODE IN COL. (D).
  - E. Finally, compared to the average sailor with respect to (READ FIRST FACTOR), do you think that you were Better Off, Worse Off, or About the Same? CIRCLE CODE IN COL. (E).
81. (ASK ONLY IF RESPONDENT WAS "DISSATISFIED" WITH TWO OR MORE FACTORS IN Q.80C). Of the factors you have said you were dissatisfied with, which one caused you the most dissatisfaction?

ENTER FACTOR # \_\_\_\_\_

(IF RESPONDENT WAS "DISSATISFIED" WITH ONLY ONE FACTOR, ENTER THAT NUMBER)

Q.80

FACTORS	A Similar to What You Expected			B How Im- portant			C How Sat- isfied			D Expect Improve- ment			E Compared to Others		
	Similar	Different	Did Not Know What to Expect	Very Important	Somewhat Important	Not at All Important	Very Satisfied	Somewhat Satisfied	Dissatisfied	Would Improve	Would not Improve	Don't Know	Better Off	Worse Off	About the Same
1. Your Navy job training	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
2. Your work assignment on shore	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
3. Your work assignment aboard ship	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
4. Your supervisors' attitudes	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
5. The social life in the Navy	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
6. The friendliness of other men in your unit	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
7. Your ability to change units	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
8. Life aboard ship (not applicable for some)	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
9. Your rank	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
10. Your pay	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
11. The medical care and services available	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
12. The way civilians treat you	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
13. Regulations on dress and appearance	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
14. Treatment of dependents	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3

82. The next questions deal with the circumstances that led to your being separated from the Navy. First, I'll read you a list of factors. Please tell me which of these contributed to the problems you have had with the Navy. How about (READ FIRST FACTOR), was this a cause of any of your problems? (CIRCLE ALL THAT APPLY)

(READ)	Yes	No
Being harassed by a superior	1	*
Being criticized or punished because you made a mistake	2	*
Having family problems	3	*
Having too little free time	4	*
Being denied a personal request	5	*
Having disagreements with men in your unit	6	*
Being falsely accused of doing something	7	*
Being dissatisfied with your duty assignment	8	*

83. Please tell me what has happened that is causing you to be separated from the Navy?

84. When you did this, did you know at the time that you could be discharged for doing it?

SKIP TO Q.86	Yes	1
	No	2

85. If you had known would you still have done it?

Yes	1
No	2
Don't know/Not sure	V

86. If you had your choice now would you rather stay in the Navy or be discharged?

SKIP TO Q.88	Stay in	1
	Be discharged	2
	Don't know/Not sure	V

87. What changes would have to be made in the Navy for you to want to stay in?

88. In the time that you have been in the Navy:

READ

	Have there been times when you wanted to stay and other times when you wanted to get out, or	1
	Have you always wanted to get out, or	2
SKIP TO Q.90	Have you always wanted to stay?	3

89. Did you ask your company commander, or anyone else to help you to get out of the Navy?

Yes	1
No	2

90. Did you ever deliberately disobey any rules because you were not granted a request?

Yes	1
No	2

91. Did anyone encourage you to try to get out of the Navy?

Yes	1
No	2

(SKIP TO Q.93)

92. Who encouraged you?

(CIRCLE  
ALL  
THAT  
APPLY)

Parent(s)	1
Male friend(s)	2
Female friend(s)	3
Other recruit(s)	4
Navy supervisor	5
Other (SPECIFY):	0

93. When your problems with the Navy first occurred, did any of your petty officers or officers give you advice or counseling?

Yes	1
No	2

(SKIP TO Q.96)

94. Did you ask for this counseling, or was it offered to you without asking?

Asked for it	1
Offered	2

95. Was the counseling friendly and sincere, or was it cold and impersonal?

Friendly	1
Cold	2

SKIP TO Q.97

96. If you had received advice or help from someone, do you think you would have been able to adjust and stay in the Navy?

Yes	1
No	2
Don't know/not sure	V

Very embarrassed,	1
Somewhat embarrassed, or	2
Not at all embarrassed?	3

98. Now I'd like to ask you some questions on your background. First of all, how old were you when you joined the Navy?

\_\_\_\_ YEARS

99. Did you enlist on the "Buddy Plan"?

Yes	1
No	2

100. How many months have you been in the Navy?

# Months \_\_\_\_\_

101. Were you ever arrested before enlisting?

Yes	1
No	2

(SKIP TO Q.103)

102. Did you have to obtain a waiver to enlist?

Yes	1
No	2

103. Are your parents still alive and living together?

(SKIP TO Q.105)

Yes	1
No	2

104. Is that because your:

(READ)

Father is dead,	1
Mother is dead,	2
Both are dead, or	3
Parents are alive but not living together	4

105. What was your grade average in your last year of school? Was it: (READ)

A, (90 or above)	1
B, (80 to 89)	2
C, (70 to 79)	3
D, (60 to 69), or	4
Failing?	5

106. What was the last grade of school your father completed?

8th grade or less	1
9th to 11th grade	2
12th grade	3
Some college	4
College graduate	5
Don't know	V

107. What was the last grade of school your mother completed?

8th grade or less	1
9th to 11th grade	2
12th grade	3
Some college	4
College graduate	5
Don't know	V

108. What is (was) your father's principal occupation?

OCCUPATION: \_\_\_\_\_

KIND OF COMPANY: \_\_\_\_\_

109. In what city and state is your home?

\_\_\_\_\_

110. Approximately how many people live in this town? (RECORD NUMBER)

\_\_\_\_\_

THAT COMPLETES OUR INTERVIEW. THANK YOU VERY MUCH.

INTERVIEWER RECORD OBSERVATIONS BELOW:

111. ETHNICITY OF RESPONDENT

White	1
Black	2
Spanish Speaking	3
Other (SPECIFY)	0
_____	

112. READING ABILITY OF RESPONDENT

Respondent could read	1
Respondent had some difficulty reading	2
Respondent could not read	3

NATIONAL ANALYSTS  
Philadelphia, Pa.

Study #1-555  
Summer, 1976

MILITARY PERSONNEL STUDY

VERSION 9

MARINE RECRUIT SUPERVISORS

Time Interview Began: \_\_\_\_\_ AM  
PM

Time Interview Ended: \_\_\_\_\_ AM  
PM

INTERVIEWER'S NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

INTRODUCTION:

Hello, I'm \_\_\_\_\_ from National Analysts, a survey research company in Philadelphia. We are conducting this study to find out how supervisory personnel feel about various aspects of recruit training and manpower attrition problems. You were included in a random sample of supervisory personnel on this base to be interviewed. All of your answers will be entirely confidential, and this survey will have no effect whatsoever on your situation in the Marines.

READ THE PRIVACY ACT



1. To start, I will mention several aspects of recruit training. For each aspect, please tell me whether you feel that recruits have been told enough by their recruiter about what to expect, or if they should have been told more. How about (READ FIRST ASPECT)? Are recruits well enough informed when they arrive at training, or should they have been told more?

READ

ASPECT	Well enough Informed	Should have been told more
The daily schedule followed in recruit training	1	*
The harassment they might get from drill instructors	2	*
The amount of physical exercise and conditioning in training	3	*
The number of weeks of recruit training	4	*
The types of behavior that are punished by discharge	5	*
The type of discharge received if someone is dismissed for bad behavior	6	*
The procedures for making a complaint against a supervisor	7	*
The purpose of the battery of classification tests that are given at the start of training	8	*
Classroom sessions and tests	9	*

2. (HAND CARD M) Using this card, please tell me which of these items, if any, are usually covered in the instructions that your recruits get in training. (CIRCLE CODE IN Q. 2 COLUMN AT RIGHT)
3. (FOR EACH ITEM WITH AN "\*" -- NOT COVERED -- CIRCLED IN Q.2 ASK:) If (READ ITEM) were covered, do you think it would help to reduce attrition? (CIRCLE CODE IN Q.3 COLUMN)

ITEMS	Q. 2		Q. 3	
	Covered	Not Covered	Yes	No
1. Procedures for applying to a school	1	*	1	
2. A description of what school training will be like	2	*	2	
3. The purpose of the battery of classification tests taken at the start of training	3	*	3	
4. Procedures for filing a complaint against a supervisor	4	*	4	
5. Types of behavior punished by discharge	5	*	5	
6. Types of duty assignments that can be expected in the fleet	6	*	6	

4. (HAND CARD N) This card lists eight factors that might cause recruits to be dissatisfied with training. Please tell me whether you think a factor causes dissatisfaction for many recruits, causes dissatisfaction for some recruits, or does not usually cause dissatisfaction. (CIRCLE CORRECT CODES IN Q.4 COLUMN)
5. Which one of these factors do you feel contributes the most to attrition of recruits. (CIRCLE ONLY ONE CODE IN Q.5 COLUMN)

FACTORS	Q. 4			Q. 5
	Causes Dissatisfaction for Many	Causes Dissatisfaction for Some	Not a Cause of Dissatisfaction	Contributes Most to Attrition
1. The quality of classroom instructions	1	2	3	1
2. The behavior of other men in the unit	1	2	3	2
3. Not having enough free time each day	1	2	3	3
4. Not being allowed to go home or leave the base	1	2	3	4
5. Strict rules and regulations	1	2	3	5
6. Harassment from superiors	1	2	3	6
7. The physical demands of training	1	2	3	7
8. A feeling of not having anyone to take complaints to	1	2	3	8

6. Generally, do recruits who graduated from high school have different reasons for being dissatisfied than recruits who did not graduate from high school?

(SKIP TO Q.8)	Yes	1
	No	2
	Don't know	V

7. How are these reasons different?

8. In your opinion would it be better to put recruits with less than a high school education in the same unit as men with a high school education, or put them in separate units?

Put in same unit	1
Put in separate unit	2

9. In general what would you prefer to do with recruits who have bad attitudes? Would you prefer to:

READ

Put them in special motivation units, or	1
Keep them in your unit and try to change their attitudes?	2

10. Some people feel that men with bad attitudes can be helped by putting them in leadership positions. When you have a recruit with a bad attitude, do you:

READ

Give him a leadership position such as squad leader to see if this improves his attitude, or	1
Do you wait until his attitude improves before making him a squad leader?	2

11. What are the main actors causing recruits ( develop behavior problems that lead to attrition?

12. Are you in complete agreement with the Marines Corps policy for handling men who are behavioral problems or would you like to see these men handled differently?

SKIP TO Q. 14

In agreement with policy	1
Would like to see men handled differently	2

13. What would you like to see done differently?

14. How do you feel about the number of recruits that are currently attrited for behavior problems? Do you think the Marine Corps is:

READ

Attriting all that should be attrited, or	1
Attriting more than is necessary, or	2
Not attriting enough?	3

15. (HAND CARD F) Looking at this list, please tell me whether you think each of the suggested changes would Reduce Attrition Significantly, Reduce it Slightly, or would Not Affect Attrition, or would Increase Attrition. How about (FIRST ITEM)? (CIRCLE ONE CODE FOR EACH OF THE 8 CHANGES)

SUGGESTED CHANGES	Reduce Significantly	Reduce Slightly	Not Affect	Increase
1. Better screening by recruiters for proper attitudes of recruits	1	2	3	4
2. Better screening by recruiters for mental abilities of recruits	1	2	3	4
3. Correctional custody platoons should put more emphasis on rehabilitation and less emphasis on discipline	1	2	3	4
4. Drill instructors should be given more authority to decide how problem recruits are handled	1	2	3	4
5. Less harassment of recruits	1	2	3	4
6. Drill instructors should be given more responsibility for schedule planning	1	2	3	4
7. Increased amount of friendly counseling for men with problems	1	2	3	4
8. Discipline standards made stricter	1	2	3	4

16. In your opinion, what would be the best way to reduce attrition without affecting the quality of recruit training?

17. Does your unit have anything like "rap sessions" in which a group of recruits can get together with a supervisor and freely express their complaints?

SKIP TO Q. 20

Yes	1
No	2

18. Would you favor such sessions if they involved only the unit's commanding officer and the recruits?

Yes	1
No	2

19. Would you favor such sessions if they involved the unit's senior drill instructor and the recruits?

Yes	1
No	2

20. Do you think that fewer problems would develop among recruits if, at the start of training, they were given a detailed schedule of the things to be covered throughout their training, or do you think that the present system is better?

Detailed schedule	1
Present system	2

21. Do you think that recruits with complaints should be permitted to go directly to an officer, or should they be required to use the chain of command?

Directly to an officer	1
Use chain of command	2

22. Which of the following best represents what recruits feel would happen if they made a complaint against their drill instructor? Do recruits feel that:

READ

The drill instructor would be reprimanded and nothing would happen to them for complaining, or	1
The drill instructor might be reprimanded but they would be harassed for complaining, or	2
Nothing would happen to the drill instructor but they would be harassed for complaining?	3
Other (SPECIFY)	0

DO NOT READ

23. (HAND CARD R) After a recruit has had a career counseling interview, he may want more information about opportunities in the Marines. Using this card, tell me if you Strongly, Slightly, or Do Not Favor each suggestion for providing a recruit with additional career counseling.

SUGGESTIONS	Strongly Favor	Slightly Favor	Do Not Favor
1. Each drill instructor should schedule meetings with his recruits and tell them what he knows about opportunities in the fleet	1	2	3
2. One drill instructor in each series should be trained in career counseling and the recruits should meet with him	1	2	3
3. One officer in each series should be trained in career counseling and recruits should meet with him	1	2	3
4. The recruit should be sent to the career counseling office for any additional counseling he requires	1	2	3

24. How much do you like being a drill instructor? Do you:

Like it very much	1
Like it somewhat	2
Dislike it a little, or	3
Dislike it very much?	4

25. Now I'd like to ask you a few background questions for analysis purposes? What is your present rank?

Sergeant	(E-5)	1
Staff Sergeant	(E-6)	2
Gunnery Sergeant	(E-7)	3
Master (1st) Sergeant	(E-8)	4
Sergeant Major	(E-9)	5

26. What is your age?

\_\_\_\_\_ YEARS

27. How many years have you been in the Marines?

\_\_\_\_\_ YEARS

28. Have you had any ( what experience? (

Appendix B(30)

Yes	1
No	2

29. Did you volunteer for drill instructor duty?

Yes	1
No	2

30. How long have you been a drill instructor?

\_\_\_\_\_ YEARS \_\_\_\_\_ MONTHS

THANK RESPONDENT AND TERMINATE INTERVIEW.



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